Divsion of Water Pollution Control 2200 Churchill Road P.O. Box 19276 Springfield, Illinois 62794-9276

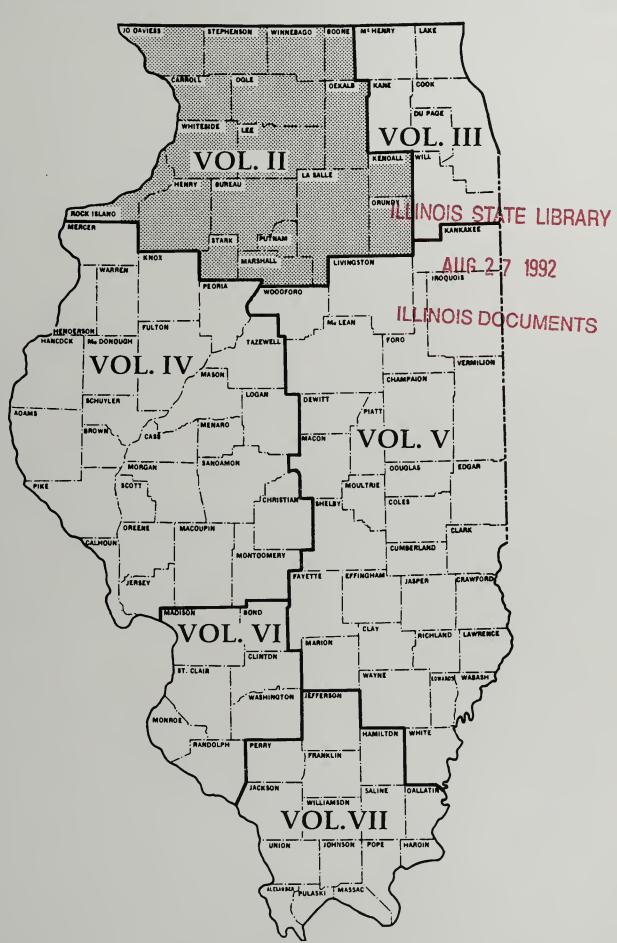
IEPA/WPC/92-110b

Volunteer Lake Monitoring Program, 1991

Volume II: Northwestern Illinois Region



17668172





ILLINOIS VOLUNTEER LAKE MONITORING PROGRAM, 1991

VOLUME II NORTHWESTERN ILLINOIS REGION

by

Amy J. Burns

Monitoring data collected by 27 volunteers

Lakes Program
Division of Water Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road, P.O. Box 19276
Springfield, Illinois 62794-9276

March, 1991





ACKNOWLEDGEMENTS

The Volunteer Lake Monitoring Program represents the coordinated activities of many individuals, but first and foremost, is a product of the efforts of the volunteers. The cooperation and assistance of the following 1991 Northwestern Illinois volunteers is gratefully acknowledged: Frank P. Loftus, Kenneth Beach, Jan Gedgaud, John Maltbey, Joyce Grabrow, Robert Minnear, William Siegner, Don Dunlavy, Mike Murrin, Michael Dunbar, Ray Sarna, Bill Konczal, Neil Dahlstrand, Marge Avram, Jerry Avram, Art West, David Nolan, Bob Neubauer, Eric Neubauer, Stacy Neubauer, Tom Rohner, Ron Malon, Janet Watson, Robert Esser, Agnes Esser, Gale Park, and Mark McReynolds.

Illinois EPA's Lakes Program, Planning Section, Division of Water Pollution Control, under the direction of Gregg Good, was responsible for the original design and continued implementation of this program. Substantial assistance was provided by the Illinois EPA's Office of Community Relations supervised by Greg Michaud.

Program coordination was provided by Amy Burns for the Illinois EPA's Division of Water Pollution Control and J. William Hammel for the Office of Community Relations. Guidance was provided by Gregg Good.

Volunteers were trained by Amy Burns and the Illinois EPA Community Relations Office. Tabular and graphical outputs of VLMP data were obtained with the IBM-PC microcomputer using software developed by Jeff Mitzelfelt. Data management and preparation of report tables and graphics were performed by Beverly Albarracin and Amy Burns.

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SECTION I: INTRODUCTION

The Illinois Environmental Protection Agency initiated the Volunteer Lake Monitoring Program (VLMP) in 1981 as a result of growing public interest in lakes and the need to expand the State's data base on lake water quality. The purpose of the VLMP is to involve volunteers with lake monitoring, thereby providing effective public education in lake ecology and management as well as a useful data base for site-specific and statewide lake quality assessment.

VLMP participants are trained to measure water transparency with a Secchi disc: an eight-inch round metal plate painted black and white in alternating quadrants that is attached to a calibrated rope. The disc is lowered into the water and the depth at which it disappears is recorded. This measurement, called the Secchi disc depth, is used to document changes in the transparency of the lake water. Typically, three sites are monitored in each lake twice per month from May through October.

The volunteer also records a series of field observations such as water color, suspended sediment and algae, aquatic weeds, and weather conditions. Recent lake management activities or other factors which could impact the lake also are documented.

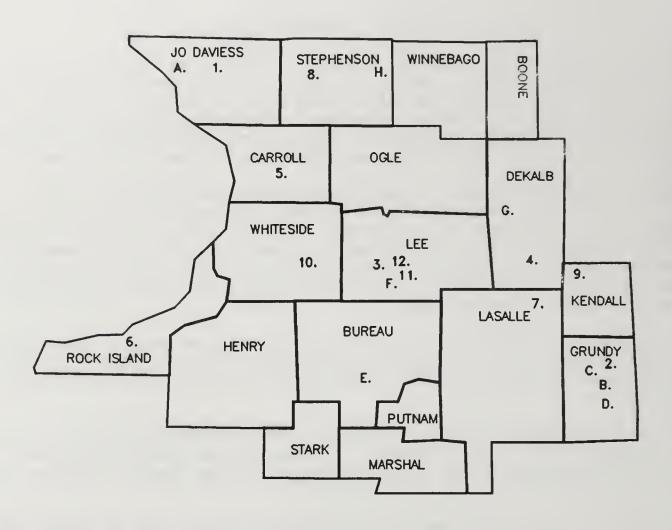
Additional water quality data is collected by volunteers on selected lakes to expand the lake water quality database. Parameters monitored include total and volatile suspended solids, nitrate+nitrite nitrogen, ammonia nitrogen, and total phosphorus.

This report is Volume II of the following series of seven reports summarizing the 1991 VLMP:

Volume I	Statewide Summary	Volume V	East-Central Illinois
Volume II	Northwestern Illinois	Volume VI	Southwestern Illinois
Volume III	Northeastern Illinois	Volume VII	Southern Illinois
Volume IV	West-Central Illinois		

Volume I (the Statewide Summary) provides information on 42 lakes throughout the State which were consistently monitored during 1991. The Statewide Summary presents a detailed discussion of the monitoring methodology and data analyses. Also included are tables and figures which present lake characteristics, lake locations, comparisons of transparency data for lakes participating in the 1990 VLMP, transparency trend analyses, a listing of volunteers, and other information relating to the 1990 VLMP.

This Regional Report volume is a compilation of lake monitoring data for 20 lakes in the Northwestern Illinois region. A regional lake location map is shown in Figure 1 and a ranking of lakes by average transparency in Figure 2 of this section. Section II contains lake data for those VLMP lakes that were monitored during four or more semi-monthly sampling periods in the 1991 season. Data collected under IEPA's Ambient Lake Monitoring Program in 1991 is also included where available.



Lakes sampled 9 or more periods

- 1. Apple Canyon
- 2. Beaver
- 3. Black Oak
- 4. Buck
- 5. Carroll
- 6. George
- 7. Holiday
- 8. Le-Aqua-Na
- 9. Loon
- 10. Sinnissippi Bayou
- 11. Sunset
- 12. Woodhaven

Lakes sampled 4-8 periods

- A. Galena
- B. Goose
- C. Heidecke
- D. Lincoln
- E. Menno-Haven
- F. Pine
- G. Shabbona
- H. Summerset

FIGURE 1 West-Central Region 1991 VLMP Lakes

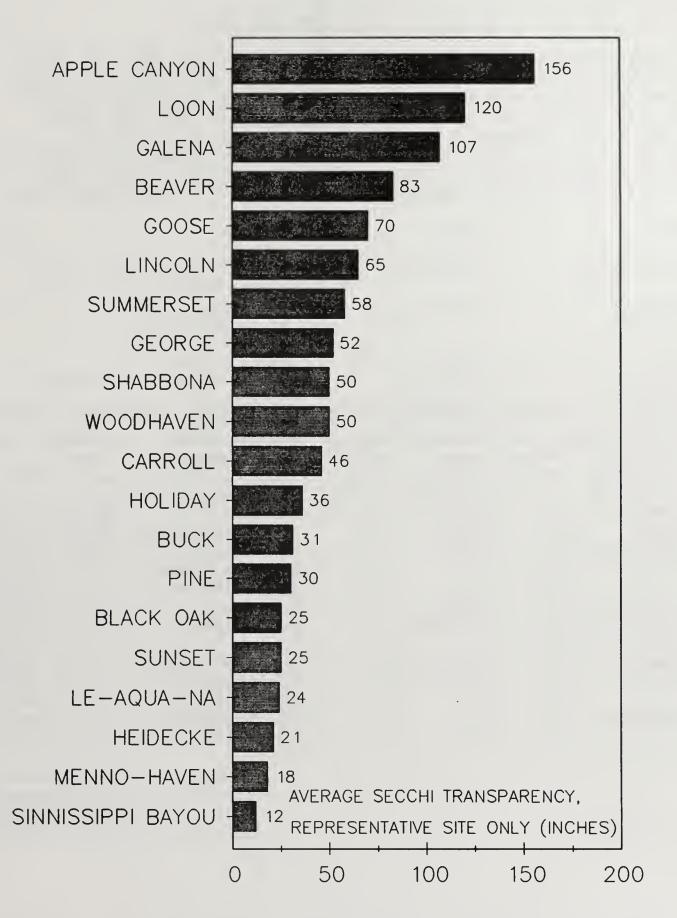


FIGURE 2. Ranking of 20 Lakes by Average Secchi Transparency (Inches),
Illinois Volunteer Lake Monitoring Program, 1991
(only lakes monitored four or more sampling periods).

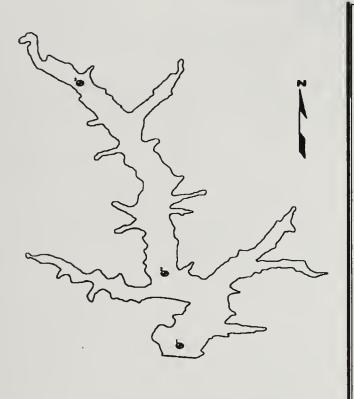
SECTION II: 1991 VLMP LAKE DATA

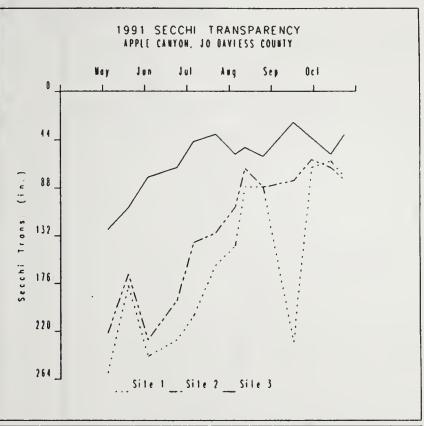
This section contains data for those Northwestern Illinois 1991 VLMP lakes which were monitored for four or more periods during the season. For each lake the following information is provided: 1) a map of the lake, 2) 1991 Secchi disc readings (in tabular and graphic form), 3) 1991 total depth readings, and 4) a summary of the 1991 field observations made by the volunteer. Volunteer Water Quality Monitoring was performed and is presented for Lakes Le-Aqua-Na, Buck, Holiday and Sinnissippi Bayou. Ambient Lake Monitoring Program data are presented for Shabbona, Loon, and Heidecke Lakes.

Lake	County	Volunteer
Apple Canyon	Jo Daviess	Frank P. Loftus and Kenneth Beach
Beaver	Grundy	Joyce Grabow
Black Oak	Lee	Jan Gedgaud and John Maltbey
Buck	DeKalb	Robert Minnear
Carroll	Carroll	William Siegner and Art West
Galena	Jo Daviess	Don Dunlavy
George	Rock Island	Mike Murrin
Goose	Grundy	Michael Dunbar
Heidecke	Grundy	IEPA Staff
Holiday	La Salle	Robert and Agnes Esser
Le-Aqua-Na	Stephenson	David Nolen
Lincoln	Grundy	Ray Sarna
Loon	Kendall	Bill Konczal, IEPA Staff
Menno-Haven	Bureau	Mark McReynolds
Pine	Lee	Jan Gedgaud and
		John Maltbey
Shabbona	DeKa1b	IEPA Staff
Sinnissippi	Whiteside	Bob Neubauer
Bayou		
Summerset	Stephenson	Neil Dahlstrand
Sunset	Lee	Jan Gedgaud and John Maltbey
Woodhaven	Lee	Jan Gedgaud and John Maltbey

AB: lat/sp/1475n, 1-7

APPLE CANYON - JO DAVIESS COUNTY



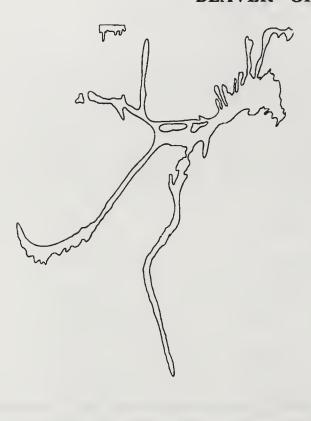


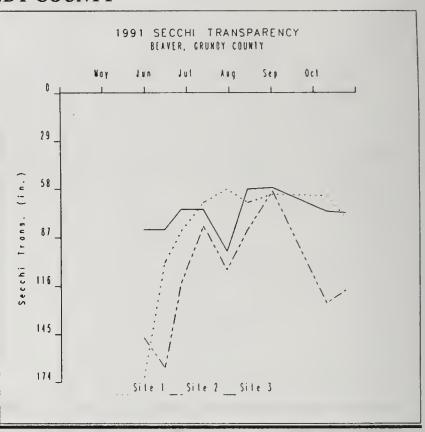
Date	Date Total Depth (Feet)		ecchi (Inc	i Tra ches)		Water Color	Suspended Sediment	Suspended Algae	Weeds Wee	eds Near Shore
Site		3	1	2	3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
05/04/91	69.0 48.0	10.5	258	222	126B	2 2 2	0 0 0	111	0 0 0	111
	69.0 48.0		178		106	2 2 6	0 0 2	2 2 2	0 0 0	1 1 3
06/02/91	69.0 48.0	10.0	243	228	78	3 3 3	0 0 1	1 1 1	0 0 0	2 1 4
06/23/91	70.0 49.0	11.0	228	192	69	2 2 2	0 0 0	0 0 0	0 0 0	1 1 2
07/05/91	69.0 48.0	10.0	206	138	46	2 2 6	0 0 3	2 2 3	0 0 0	2 2 2
07/21/91	69.0 48.0	10.0	159	129	39	2 2 6	0 0 3	2 2 3	0 0 0	2 2 2
08/04/91	69.0 48.0	10.0	141	105	57	2 3 3	0 0 1	1 3 3	0 0 0	1 2 3
08/11/91	69.0 48.0	10.0	87	70	51	4 4 6	0 0 1	3 3 3	0 0 0	2 2 1
08/24/91	69.0 48.0	10.0	87	87	59	3 3 6	0 0 2	3 3 4	0 0 0	3 4 4
09/15/91	69.0 48.0	10.0	230	81	28	2 3 4	0 0 1	1 3 4	0 0 2	1 1 4
09/28/91	69.0 48.0	9.0	69	62	42	4 4 4	0 0 0	4 4 4	0 0 0	1 1 3
10/12/91	69.0 48.0	10.0	63	69	57	6 6 6	1 1 2	2 2 2	0 0 0	0 1 3
10/22/91	69.0 48.0	9.0	78	81	39	4 4 4	0 0 0	4 4 4	0 0 0	1 1 3

Minimum 69.0 48.0 9.0 63 62 28 Maximum 70.0 49.0 11.0 258 228 126 Average 69.1 48.1 10.0 156 125 61 Std Dev 0.3 0.3 0.5 73 59 28

Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

BEAVER - GRUNDY COUNTY



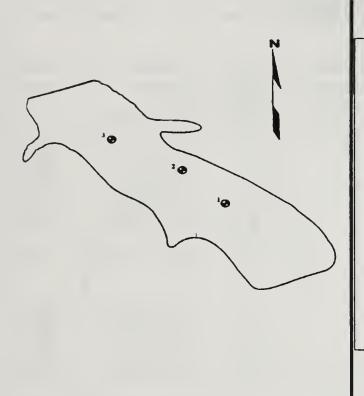


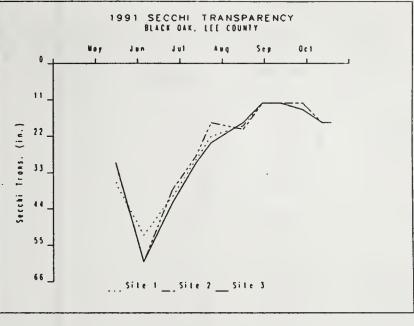
Date	Total	Dept Teet)	th	Secch (I	i Tra		Wat	er olo		Susp Se				Suspend			Weed			Wee	ds N Sho		•
Site	1	2	3	1	2	3	1	2	3	1	2	3		1 2	3		1	2	3		1 2	3	
05/30/9	20.0	25.0	9.0	171	147	82	2	2	2		1	1	1	1	1	1		0	0	0	1	1	1
06/14/9					165	82	2	2	3		_	1	_	1	1	2		0	0	1	1	1	2
06/26/5	1 19.5	24.5	8.5	83	114	70	3	2	3		I	1	2	3	1	2		0	0	0	1	1	2
07/12/9	1 19.5	24.0	9.0	66	80	70	6	6	6		2	1	1	2	1	2		0	0	1		1 2	2
07/29/9	1 18.5	24.0	8.5	58	106	95	6	3	6		1	1	1	2	1	1		0		1		1	1
08/13/9	1 18.5	24.0	8.5	66	82	58	6	6	6		2	1	2	2	2	2		0	0	2		1	2
08/31/9	1 19.0	23.5	7.5	61	59	57	5	4	6		0	0	2	3	3	2		0	0	0	3	3 1	3
10/09/9	1 19.0	24.0	8.5	62	126	71	5	2	4		2	1	1	3	2	2		0	0	0	1	0	2
10/23/93	1 19.0	23.0	9.0	75	118	72	2	2	4		1	1	1	1	1	3		0	0	0	(1	1

Minimum 18.5 23.0 7.5 58 59 57 Maximum 20.0 25.0 9.0 171 165 95 Average 19.2 24.1 8.6 83 111 73 Std Dev 0.6 0.7 0.5 36 34 12

Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green5 - pea soup6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

BLACK OAK - LEE COUNTY



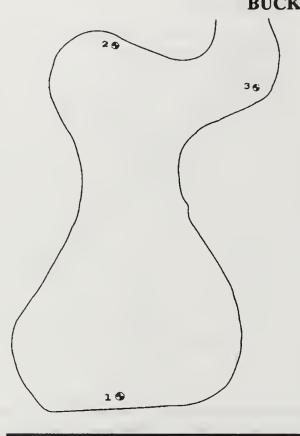


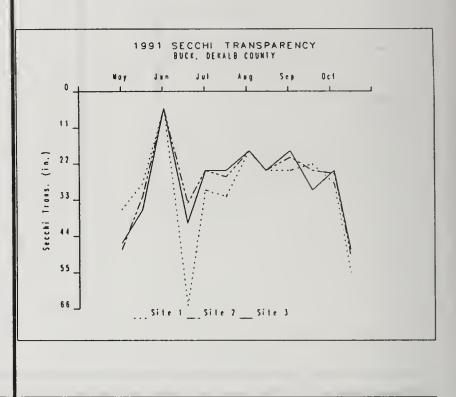
Date	Total	l Dep	th	Secch	i Tr	ans.	Water	S	uspended	Suspended	Weeds	;	Weeds Near
	(F	reet)		(I:	nche	s)	Colo	r	Sediment	Algae	at S	ite	Shore
Site	1	2	3	1	2	3	1 2	3	1 2 3	1 2	3 1	2 3	1 2 3
05/15/9	1 7.0	8.5	8.0	36	30	30	7 7	7	1 1 1	0 0 0	0	0 0	0 0 0
06/04/9	1 8.0	8.0	8.5	52	60	60	3 3	3	2 2 3	2 2 2	2 0	0 0	0 0 0
06/25/9	1 7.5	8.0	7.0	40	38	42	7 7	7	3 3 3	2 2 2	2 0	0 0	1 0 0
07/12/9	7.5	8.0	8.0	29	28	30	6 6	6	2 2 2	3 3 3	0	0 0	0 0 0
07/23/9	7.0	8.0	7.5	22	18	24	5 5	5	1 1 1	4 4 4	0	0 0	1 1 1
08/15/9	1 7.0	7.5	8.0	19	20	18	6 6	6	3 3 3	4 4 4	0	0 0	0 0 0
08/29/9	7.0	8.0	8.0	12	12	12	5 5	5	1 1 1	4 4 4	0	0 0	1
09/11/9	7.0	7.5	7.5	12	12	12	5 5	5	111	4 4 4	0	0 0	0 0 0
09/27/91	7.0	7.5	7.5	12	12	14	5 5	5	1 1 1	4 4 4	0	0 0	1 1 1
10/11/91	6.0	8.0	8.0	18	18	18	5 5	5	111	4 4 4	0	0 0	0 0 0
10/18/9	7.5	7.5	8.5	18	18	18	5 5	5	1 1 1	4 4 4	0	0 0	0 0 0
Minimu	m 6.0	7.5	7.0	12	12	12							

Minimum	6.0	7.5	7.0	12	12	12
Maximum	8.0	8.5	8.5	52	60	60
Average	7.1	7.9	7.9	25	24	25
Std Dev	0.5	0.3	0.5	13	14	15

Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

BUCK - DEKALB COUNTY





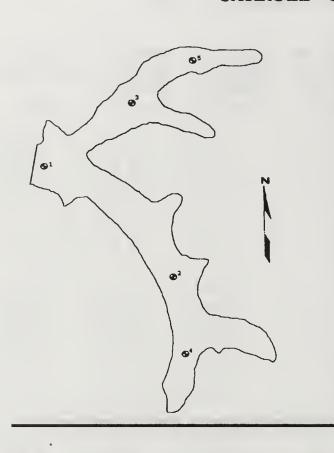
Date	Total (F	Dept eet)	h		hi Tra nches)			Wat Colo		Susp Sed				spe Alga	nded ne		Vœ t Si			eds Sho	Nea re	r
Site	1	2	3	1	2 3	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	
05/01/91		4.0	4.0	36		46W	6	6	6	3	3	2	3	3	2	0	2	3	0	0	0	
05/16/91	14.0	4.0	4.0	28	32	36	7	7	7	3	3	3	3	3	3	0	3	4	1	4	4	
06/01/91	19.5	9.0	8.0	5	5	5	10	10	10	4	4	4	0	0	0	0	0	0	0	0	0	
06/18/91	14.0	4.5	4.0	65	34	40	2	2	2	0	0	0	1	1	1	0	1	0	1	3	1	
07/01/91	14.0	4.0	4.0	30	24	24	2	2	2	0	0	0	3	3	3	0	0	0	0	0	0	
07/16/91	13.5	3.0	3.0	32	26	24	2	2	2	0	0	0	3	3	3	0	0	0	0	0	0	
08/02/91	13.0	4.0	3.5	18	18	18	3	3	3	0	0	0	3	3	3	0	0	0	0	0	0	
08/14/91	14.0	4.0	4.0	24	24	24	3	3	3	0	0	0	3	3	3	0	0	0	0	0	0	
09/01/91	14.0	4.0	4.0	24	20	18	15	15	15	3	3	3	0	0	0	0	0	0	0	0	0	
09/17/91	13.0	4.0	4.0	22	24	30	7	7	7	3	3	3	3	3	3	0	0	0	0	0	0	
10/03/91	14.0	4.0	4.0	28	25	24	8	8	8	3	3	3	0	0	0	0	0	0	0	0	0	
10/15/91	14.0	4.0	4.0	55	50B	48B	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	
Minimur	n 13.0	3.0	3.0	5	5	5																
Maximu	m 19.5	9.0	8.0	65	50	48																
Average	14.3	4.4	4.2	31	28	28																
Std Dev	1.7	1.5	1.2	16	12	13																

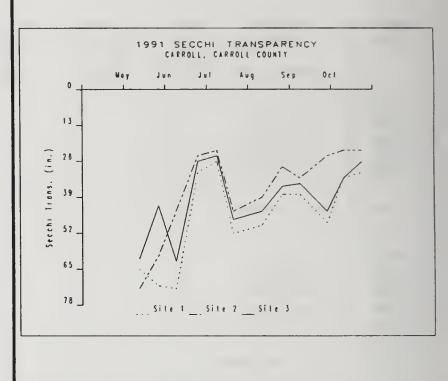
Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

1991 VOLUNTEER LAKE MONITORING DATA FOR BUCK LAKE, DEKALB COUNTY

Map Code	S i t	Sample Date	Depth of Sample	Total Suspended Solids	Volatile Suspended Solids	Nitrate/ Nitrite Nitrogen	Ammonia/ Ammonium Nitrogen	Total Phosphorus
	e	(MM/DD/YY)	(Feet)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
VTZN	1	05/13/91	1	1	1	11.00	0.01	0.005
VTZN	1	06/18/91	1	2	1	9.90	0.09	0.026
VTZN	1	07/15/91	1	5	2	1.80	0.02	0.145
VTZN	1	08/13/91	1	6	3	0.05	0.03	0.102
VTZN	1	09/17/91	1	7	4	0.01	0.01	0.292
Site	1 1	lean Surface		4	2	4.55	0.03	0.114
VTZN	3	05/13/91	1	2	1	-9999	0.03	0.025
VTZN	3	06/18/91	ī	4	2	9.40	0.09	0.025
VTZN	3	07/15/91	ī	6	4	1.80	0.04	0.109
VTZN	3	08/13/91	ī	6	4	0.09	0.02	0.088
VTZN	3	09/17/91	ĩ	12	6	0.25	0.11	0.210
Site	3 N	lean Surface		6	3	2.89	0.06	0.091
Date	Mear	05/13/91		2	1	11.00	0.02	0.015
Date				3	2	9.65	0.09	0.025
Date				6	3	1.80	0.03	0.127
Date				6	4	0.07	0.03	0.095
Date				10	5	0.13	0.06	0.251
Lake	Mear	Surface		5	3	3.81	0.04	0.103

CARROLL - CARROLL COUNTY



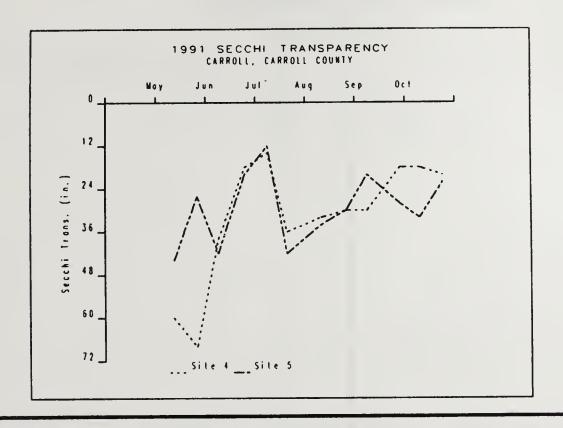


Date	Total Depth (Feet)	Secchi Trans. (Inches)	Water Color	Suspended Sediment	Suspended Algae	Weeds at Site	Weeds Near Shore
Site	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
04/14/91	60.0 38.0 42.0	28 24 24	777	4 4 4	3 3 3	1 1 1	2 2 2
04/24/91	60.0 37.0 41.0	38 30 30	777	2 3 3	1 1 1	0 0 0	0 0 0
05/12/91	59.5 39.0 42.0	65 72 61	3 2 3	0 0 0	3 2 3	0 0 0	1 1 1
05/26/91	60.0 25.0 42.0	71 60 42	3 3 6	1 1 3	2 2 2	0 0 0	1 1 1
06/08/91	60.0 37.0 41.0	72 44 62	2 3 3	1 2 2	3 3 3	0 0 0	1 1 1
06/24/91	59.0 36.0 40.0	30 24 26	4 7 7	1 3 3	4 4 4	0 0 0	1 1 1
07/08/91	58.0 35.0 38.0	26 22 24	677	3 4 4	4 4 4	0 0 0	1 1 1
07/20/91	57.0 24.0 36.0	52 44 47	6 6 6	2 2 2	4 4 4	0 0 0	1 1 1
08/10/91	57.0 34.0 36.0	49 39 44	6 7 6	3 3 2	3 3 3	0 0 0	1 1 1
08/25/91	50.0 18.0 34.0	38 28 35	6 7 6	2 3 2	3 3 3	0 0 0	1 1 1
09/07/91	48.0 18.0 32.0	38 32 34	6 7 6	3 4 3	4 4 4	0 0 0	1 1 1
09/27/91	47.0 19.0 32.0	48 24 44	4 9 4	2 4 2	3 3 3	0 0 0	1 1 1
10/09/91	47.0 19.0 32.0	32 22 32	3 7 3	2 4 2	2 3 3	0 0 0	1 1 1
10/23/91	47.0 22.0 32.0	30 22 26	6 6 6	3 3 3	3 3 3	0 0 0	1 1 1

Minimum 47.0 18.0 32.0 26 22 24 Maximum 60.0 39.0 42.0 72 72 62 Average 54.1 27.2 36.4 46 36 40 Std Dev 5.7 8.3 4.1 16 16 13

4 - very green 5 - pea soup Key 1 - clear 7 - brownish green 10 - very brown 13 - yelowish 14 - grayish Color 2 - light green 8 - light brown 11 - milky chocolate 3 - moderately green 6 - greenish brown 9 - moderately brown 12 - tan 15 - other Other: 0 - none 1 - minimal 2 - slight 3 - moderate 4 - substantial

CARROLL - CARROLL COUNTY



Date	Total	Depth	Secch	i Trans.	Wa	iter	Sus	pended	Su	spended	W	eeds	Weed	Is Near
	(Fe	et)	(Incl	hes)	Col	or	Sedi	ment	A	Algae	at	Site	Sh	ore
Site	4	5 6	4	5 6	4 5	6	4	5 6	4 :	5 6	4	5 6	4	5 6
04/14/91	16.0	17.0	22	22	7	7	4	4	3	3	1	1	2	2
04/24/91	17.0	15.0	24	26	7	7	3	3	1	1	0	0	0	0
05/12/91	16.0	17.0	60	44	2	3	0	1	2	3	0	0	1	1
05/26/91	17.0	17.0	68	26	3	7	1	4	2	2	0	0	1	1
06/08/91	17.0	16.0	38	42	4	4	3	3	3	3	0	0	1	1
06/24/91	17.0	16.0	18	20	7	7	4	4	4	4	0	0	1	1
07/08/91	16.0	15.0	14	12	10	10	4	4	4	4	0	0	1	1
07/20/91	14.0	8.0	36	42	6	6	3	3	4	4	0	0	1	1
08/10/91	14.0	6.0	32	34	7	7	4	•4	3	3	0	0	1	1
08/25/91	12.0	6.0	30	30	10	10	4	4	3	3	0	0	1	1
09/07/91	12.0	8.0	30	20	7	7	4	4	4	4	0	0	1	1
09/27/91	11.0	7.0	18	28	11	7	4	3	3	3	0	0	1	1
10/09/91	11.0	7.0	18	32	10	3	4	2	3	2	0	0	1	1
10/23/91	11.0	7.0	20	22	7	6	4	3	3	3	0	0	1	1
Minimu	m 11	.0 6.0	14	12										
Maximu			68	44										
Average		0 10.9	32	29										
Std Dev			17	10										

Key1 - clear4 - very green7 - brownish green10 - very brown13 - yeldColor2 - light green5 - pea soup8 - light brown11 - milky chocolate14 - gray3 - moderately green6 - greenish brown9 - moderately brown12 - tan15 - other	
--	--

2 - slight

1 - minimal

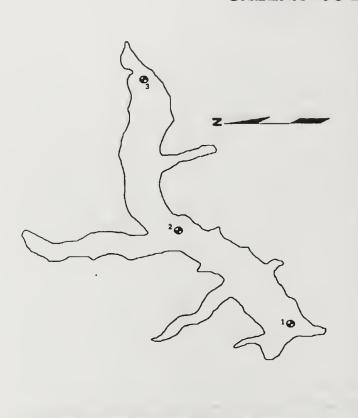
Other:

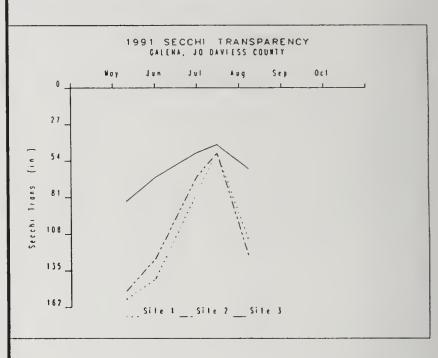
0 - none

3 - moderate

4 - substantial

GALENA - JO DAVIESS COUNTY



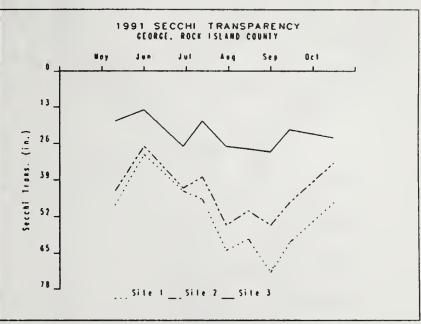


Date		Deptleet)	n S	ecchi (Inc	Tran	IS.		ate lor	r	Sus Sed	-			Susp		ed	Wee at S			Weed	is N	
Site	1	2	3 1	2	2	3	1 2	2 :	3	1	2	3		1	2 3	3	1	2	3	1	2	3
05/10/91	48.0	28.0	7.0	156	150	84B	1	1	1		0	0	0	0	0	0	0	0	2	1	1	1
05/31/91	48.0	26.0	7.0	141	126	66	1	1	ì	(0	0	1	0	0	0	0	0	2	1	1	1
06/30/91	47.0	27.0	7.0	78	66	48	2	2	3	(0	ì	1	1	1	1	0	1	3	1	2	3
07/15/91	46.0	27.0	7.0	48	48	42	1	2	3	(0	0	1	1	1	2	0	1	3	1	2	2
08/07/91	47.0	27.0	7.0	114	126	60	1	1	3	(0	0	1	0	0	1	0	0	0	1	1	2
Minimur	n 46.0	26.0	7.0	48	48	42																
Maximu	n 48.0	28.0	7.0	156	150	84																
Average	47.2	27.0	7.0	107	103	60																
Std Dev	0.8	0.7	0.0	45	44	16																

Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	
Color	2 - light green 3 - moderately green	5 - pea soup 6 - greenish brown	8 - light brown 9 - moderately brown	11 - milky chocolate 12 - tan	14 - grayish 15 - other	
Key	l - clear	4 - very green	7 - brownish green	10 - very brown	13 - yelowish	

GEORGE - ROCK ISLAND COUNTY



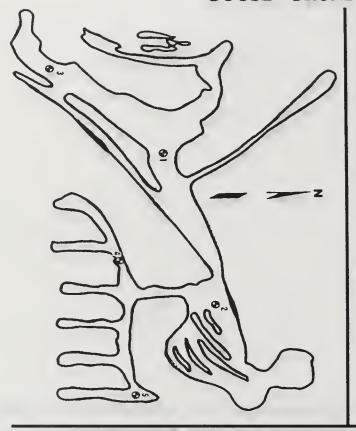


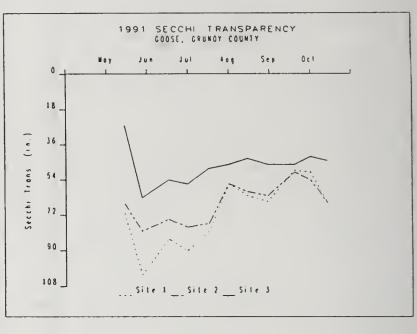
Date	Total Depth (Feet)	Secchi Trans. (Inches)	Water Suspended Color Sediment	Suspended Algae	Weeds at Site	Weeds Near Shore
Site	1 2 3	1 2 3	1 2 3 1 2 3	1 2 3	1 2 3	1 2 3
05/10/91	50.5 29.0	7.0 48 43 18	669 113	1 1 1	0 0 0	1 0 1
05/31/91	50.5 31.0	5.5 30 27 14	7 7 10 2 2 3	2 2 2	0 0 0	2 2 2
06/28/91	49.0 31.0	5.0 43 42 27	2 2 3 0 0 1	3 3 3	0 0 0	1 2 2
07/12/91	50.0 29.5	5.0 46 38 18	2 2 7 0 0 3	3 3 3	0 0 0	1 1 1
07/29/91	49.0 30.5	5.0 64 55 27	2 2 6 0 0 2	2 2 2	000	1 2 2
08/14/91	49.5 29.0	5.0 60 50 28	2 2 6 0 0 1	2 2 2	0 0 0	1 2 2
08/30/91	47.0 30.5	5.0 72 55 29	1 2 6 0 0 2	2 2 3	0 0 0	1 1 2
09/13/91	49.0 30.0	5.0 61 47 21	1 2 6 0 0 1	1 2 3	0 0 0	1 1 2
10/15/91	49.5 30.0	5.0 47 33 24	2 3 6 0 1 1	3 3 3	0 0 0	1 1 1

Minimum 47.0 29.0 5.0 30 27 14 Maximum 50.5 31.0 7.0 72 55 29 Average 49.3 30.1 5.9 52 43 23 Std Dev 1.1 0.8 0.5 13 10 5

Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	
Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	

GOOSE - GRUNDY COUNTY

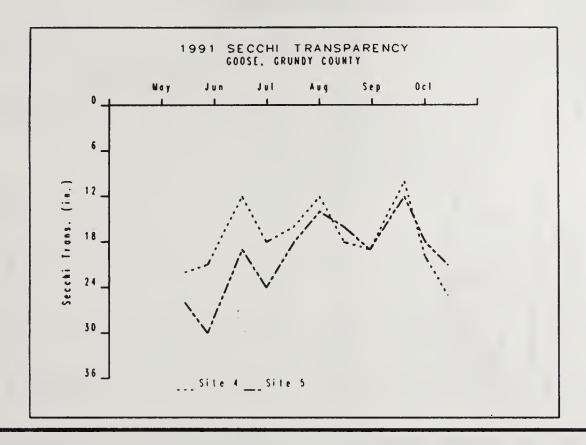




Date Site	Total (Fee	Deptlet)			hi Tra hes)	ans.	Col	ater or		Suspe Sedin	me		_	pen gae	;	at S	eeds Site 2		Wee Sl	hore	
Site	•	2 .	, ,	. 4	, ,		1 2	, ,		1	_	J	•	٠ .	,	1	2	J	•	2	3
05/14/91	26.0	15.5	5.5	71	66	26	2	2	2	0	0	0	1	1	1	0	0	0	1	2	1
05/27/91	25.5	15.5	5.5	102	80	63	2	2	2	. 0	0	0	1	1	1	0	0	1	1	2	1
06/16/91	26.0	15.0	5.5	84	74	54	2	2	2	0	0	0	1	1	1	0	0	3	2	3	2
06/30/91	26.0	15.0	5.0	90	78	56	2	2	2	0	0	0	1	1	1	0	0	4	3	4	3
07/16/91	25.0	14.0	5.0	80	76	48	2	2	2	0	0	0	2	2	2	1	0	4	3	4	3
07/31/91	24.5	14.0	4.5	56	5 6	46	2	2	2	0	0	0	1	1	1	0	0	3	3	4	4
08/14/91	25.0	14.0	4.0	62	60	43	2	2	2	0	0	0	1	1	2	0	0	4	3	4	4
08/29/91	25.0	14.0	4.0	65	62	46	2	2	2	0	0	0	1	1	2	0	0	4	4	4	4
09/18/91	24.5	13.5	4.0	49	50	46	2	2	2	1	1	1	2	2	2	0	0	2	3	4	4
09/30/91	24.0	14.0	4.0	50	54	42	2	2	2	1	1	1	2	2	2	0	0	0	3	3	3
10/13/91	24.5	14.5	4.5	66	66	44	2	2	2	1	1	1	2	2	2	0	0	0	1	2	3
Minimun	n 24.0	13.5	4.0	49	50	26															
Maximur	n 26.0	15.5	5.5	102	80	63															
Average	25.1	14.5	4.7	70	66	47						•									
Std Dev	0.7	0.7	0.6	17	10	9															

Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

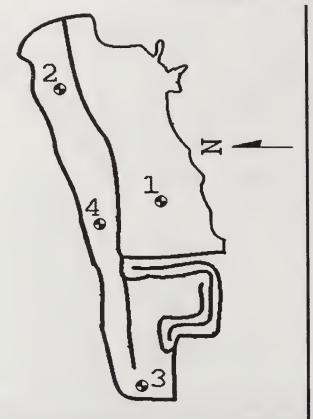
GOOSE - GRUNDY COUNTY

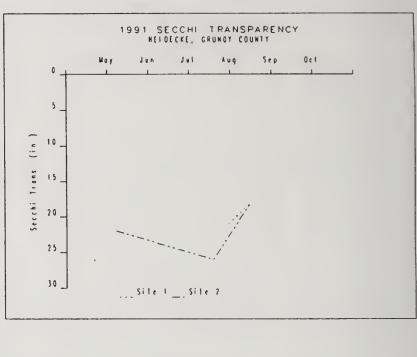


Date		al Der		cchi Tra	ns. Water Color	Suspended Sediment	Suspended Algae	Weeds at Site	Weeds Near Shore
Site	4	5	6 4	5 6	4 5 6	4 5 6	4 5 6	4 5 6	4 5 6
05/14/91	6.0	5.0	22	26	7 7	1 1	0 0	0 0	1 1
05/27/91	5.5	5.0	21	30	14 7	2 2	0 0	0 0	1 1
06/16/91	5.0	5.0	12	19	14 6	2 2	0 0	1 0	2 1
06/30/91	4.5	4.5	18	24	6 6	2 2	0 0	2 1	3 2
07/16/91	4.5	4.0	16	18	14 6	2 2	1 1	2 0	4 3
07/31/91	4.0	4.0	12	14	14 6	1 1	1 1	0 1	4 2
08/14/91	4.0	4.0	18	16	3 6	1 1	2 2	0 0	3 2
08/29/91	4.0	4.0	19	19	3 3	1 1	2 2	1 0	4 3
09/18/91	4.0	4.0	10	12	14 6	2 2	1 1	0 0	3 2
09/30/91	3.5	3.5	20	18	14 6	2 2	2 2	0 0	2 1
10/13/91	4.0	4.0	25	21	14 6	2 2	1 1	0 0	1 1
Minimum	3.5	3.5	10	12	,				
Maximun	n 6.0	5.0	25	30	·				
Average	4.5	4.3	18	20					
Std Dev	0.8	0.5	5	5					

Other:	3 - moderately green	6 - greenish brown	9 - moderately brown 2 - slight	12 - tan	15 - other	
Key	1 - clear	4 - very green	7 - brownish green	10 - very brown	13 - yelowish	
Color	2 - light green	5 - pea soup	8 - light brown	11 - milky chocolate	14 - grayish	

HEIDECKE - GRUNDY COUNTY

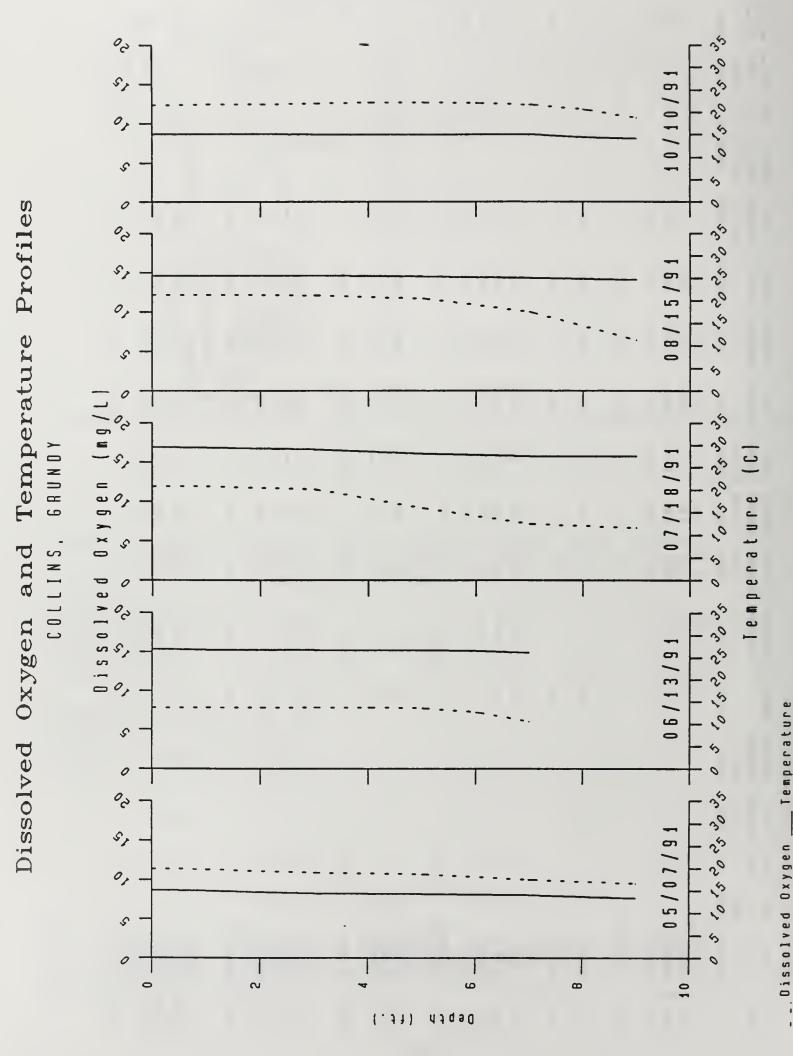




Date		tal Deg (Feet)	pth		i Trans hes)	s. W Col		Sus Sedi			Suspended Algae	Weeds at Site	Weeds Near Shore
Site	1	2	3	1 2	2 3	1 2	3	1 2	2 3		1 2 3	1 2 3	1 2 3
06/13/91	8.5	11.0 17.0 17.5	15.0	22 23	24 26	6	7 6 7	1	2 1 0	2	0 0 0 0 0 1 1	0 0 0 0 0 0 0	1 1 1 0 1 1 0
08/15/91		19.0		8	18		7		0		0 0	0 0	1 1
Minimun Maximun				18 23	18 26								
	10.4	16.1 3.5	15.0	21 4	22 4								

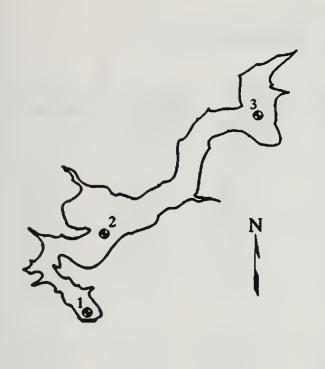
Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

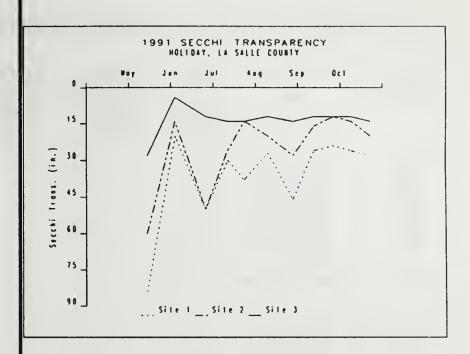
<u>.</u> و	_	15.0	7.8	29.5	25.0	24.2	13.3	13.3	15.3	26.7	23.0	28.5	24.5	25.1	27.6	24.1	35.6	15.0	28.0	29.0	25.4	24.0	15.2	26.7	29.6	26.1	24.4
Tate	9	15	*	2	×	*	5	ţ.	5	36	2	×	*	25	27	2	22	15	28	2	22	*	51	*	2	×	25
ORY gen	(mg/L)	11.3	7.0	11.9	12.2	10.	 8:	ş.	11.2	0.0	11.7	12.0	10.7	3.6	6.2	3.6	4 :	10.5	•	1.5	•.	-	11.3	7.9	11.0	13.1	10.6
Oxygen	(mg/L)	38	22	z	37	38	ş	38	SS	32	35	*	S.	8	32	38	33	7	33	S	7	*	35	32	35	2	35
£ .		•	7.	6.7	• •	•		~	7.	9.3	1.4	•.5	:	7.8	6.3	7.8	7.9	7.3	•.	*.	7.5	7.9	8.	6.3	1.7	9.4	8.8
Aikaiinity (mg/L as	C#C03)	•	•	•	2	•	۰	•	•	•	2	•	•	•	•	•	-	0	~	•	•	~	un	~	•	0	•
Alkaiinity (mg/L as	(6000)	2	174	3	2	14	•	ž	176	186	182	<u>=</u>	141	170	182	143	•	170	91	172	170	170	17.0	170	175	172	174
tivity	(umho/cm)	1600	1482	1540	182	1163	1604	1901	1582	1478	1540	155	:	1487	1940	ž	1060	1570	1473	1520	155	1170	1991	1479	1540	153	1188
Phosphorus	(1/8m)	910.0	0.027	0.021	0.022	0.021	9.0.0	0.014	0.014	0.038	0.028	0.021	0.024	0.04	0.038	0.029	0.038	0.012	0.020	0.033	0.023	0.034	0.014	0.031	0.034	0.021	0.023
Phosphorus	(WBV)	. 0	•.004	9.100	9.100	0.003	960.0	0.044	0.00	0.107	0. 102	0.117	0.103	0.120	0.105	0.161	0.120	0.067	960.0	0.112	0.104	0.100	90.0	0.097	0.101	90.108	960.0
Kjeidahi Nitrogen	(MgA)	1.86	7.7	1.4	2.2	1.43	8.	1.00	1.40	1.80	1.40	2.5	1.52	9.	1.40	9.	3.	1.40	1.60	1.40	1.40	1.48	1.48	1.55	1.40	3.	1.47
Amonium Altrogen	(Agh)	.03	9.08	3.	9.0	2.0	0.08	0.03	0.05	0.0	0.03	0.08	8.0	0.23	0.03	0.00	0.10	9.0	0.04	9.0	9.0	20.0	9.0	0.07	0.04	9.0	0.08
Nitrite Nitrogen	(10 (10)	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.0	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
(Corrected)	(76n)	44.90	29.90	36.36	•	37.59	•		58.74	56.28	62.82	•	59.27	•	•	•	•	57.62	34.33	54.64	•	98.86	51.62	43.00	90.60		48.43
	(MTC)	•	8.3	3.6	7.9	6.9	10.2	10.2	10.2	4.0	3.3	6.7	÷.	7.4	4.1	15.5	•.	10.1	3.9	2.0	7.4	•	4.7	9.1	3.8	7.3	•
Suspended Solids	(mg/L)	•		:	5	9	•	•	•	=	•	2	ē	•	=	15 2	ç.	•	•	9	2	9	٨	•	9	15	5
Soilds	(mg/L)	2	2	=	2	11	20	2	2	2	7	=	2	5	•	2	2	11	•	=	12	2	=	12	91	•	91
Trans.	(Jn.)	22	z	2	=	2		:	2	72	92	=	2		•	•	:	7	90	22	=	32	2	2	25	=	23
of Sample	(Feet)	-	-	-	-		•		-	•	-	-		2	15	1		•	-	-	-						
	(MA/DD/YY) (16/10/50	16/11/90	16/01/10	16/51/90	mean surface	05/07/91	mean Bottom	05/07/01	06/13/91	07/10/91	16/51/90	mean Surface	19/11/90	07/18/91	10/51/00	mean Bottom	08/07/01	06/13/91	07/18/91	16/51/00	aean Surface	05/07/91		07/10/91	04/15/91	Lake mean Surface
n – -	•	-	-	-	-	-	-	-	~	~	~	~	~	~	~	~	~	•	-	•	•	4	Date Mean	Date Mean	Date Acan	Mean	Acan
1 3		ă	ğ	ğ	ğ	Site	ğ	Site	ğ	ğ	ă	ğ	# 17	Š	ğ	ğ	Site	ă	ğ	XOS	ğ	Site	Date	Date	Date	Date	Lake



-18-

HOLIDAY - LA SALLE COUNTY





Date		l Dep	oth		hi Ti		_	Wat Colo		Sus	•	nded	Suspe		Weeds at Site	Weeds Near Shore
Site	1	2	3	1	2	3	1	2	3	1 2	2 3	3	1 2	3	1 2 3	1 2 3
05/01/91	14.0	4.0	4.0	36	48B	46W	6	6	6	3	3	2	3	3 2	0 2 3	0 0 0
05/16/91	14.0	4.0	4.0	28	32	36	7	7	7	3	3	3	3	3 3	0 3 4	1 4 4
06/01/91	19.5	9.0	8.0	5	5	5	10	10	10	4	4	4	0	0 0	0 0 0	0 0 0
06/18/91	14.0	4.5	4.0	65	34	40	2	2	2	0	0	0	1	2 2	0 1 0	1 3 1
07/01/91	14.0	4.0	4.0	30 2	24	24	2	2	2	0	0	0	3	3 3	0 0 0	0 0 0
07/16/91	13.5	3.0	3.0	32	26	24	2	2	2	0	0	0	3	3 3	0 0 0	0 0 0
08/02/91	13.0	4.0	3.5	18	18	18	3	3	3	0	0	0	3	3 3	0 0 0	0 0 0
08/14/91	14.0	4.0	4.0	24	24	24	3	3	3	0	0	0	3	3 3	0 0 0	0 0 0
09/01/91	14.0	4.0	4.0	24	20	18	15	15	15	3	3	3	0	0 0	0 0 0	0 0 0
09/17/91	13.0	4.0	4.0	22	24	30	7	7	7	3	3	3	3	3 3	0 0 0	0 0 0
10/03/91	14.0	4.0	4.0	28	25	24	8	8	8	3	3	3	0	0 0	0 0 0	0 0 0
10/15/91	14.0	4.0	4.0	55	50B	48B	2	2	2	2	2	2	2	2 2	0 0 0	0 0 0

 Minimum 13.0 3.0 3.0
 5
 5
 5

 Maximum 19.5 9.0 8.0
 65
 50
 48

 Average 14.3 4.4 4.2
 31
 28
 28

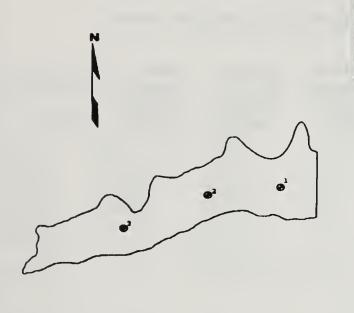
 Std Dev 1.7 1.5 1.2
 16
 12
 13

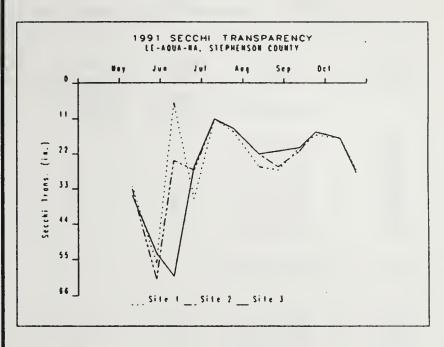
Other:	3 - moderately green 0 - none	6 - greenish brown 1 - minimal	9 - moderately brown 2 - slight	12 - tan 3 - moderate	15 - other 4 - substantial	
Key Color	1 - clear 2 - light green	4 - very green 5 - pea soup	7 - brownish green 8 - light brown	10 - very brown 11 - milky chocolate	13 - yelowish 14 - grayish	

1991 VOLUNTEER LAKE MONITORING DATA FOR HOLIDAY, LA SALLE COUNTY

Map Code	S i t	Sample Date (MM/DD/YY)	Depth of Sample (Feet)	Total Suspended Solids (mg/L)	Volatile Suspended Solids (mg/L)	Nitrate/ Nitrite Nitrogen (mg/L)	Ammonia/ Ammonium Nitrogen (mg/L)	Total Phosphorus (mg/L)
VTX VTX VTX VTX VTX VTX	1 1 1 1 1	05/21/91 06/25/91 07/23/91 08/27/91 09/25/91 10/22/91	1 1 1 1 1	5 - 4 8 4 8 15	2 2 6 2 4 7	7.90 9.90 3.20 0.01 0.06 0.01	0.09 0.15 0.08 0.06 0.30 0.03	0.028 0.037 0.045 0.080 0.216 0.083
Site	1	Mean Surface		7	4	3.51	0.12	0.082
VTX VTX VTX VTX VTX VTX	2 2 2 2 2 2 2	05/21/91 06/25/91 07/23/91 08/27/91 09/25/91 10/22/91	1 1 1 1 1	5 5 34 9 18 20	3 3 30 6 7 9	8.10 9.60 2.50 0.01 0.03 0.01	0.03 0.12 0.18 0.03 0.19 0.05	0.061 0.063 0.135 0.163 0.272 0.104
Site	2	Mean Surface		15	10	3.38	0.10	0.133
VTX VTX VTX VTX VTX VTX	3 3 3 3 3	05/21/91 06/25/91 07/23/91 08/27/91 09/25/91 10/22/91	1 1 1 1 1	33 10 17 18 24 40	6 3 14 9 13 16	15.00 9.00 0.63 0.01 0.01	0.15 0.06 0.66 0.32 0.06 0.65	0.117 0.080 0.276 0.198 0.276 0.129
Site	3	Mean Surface		24	10	4.11	0.32	0.179
Date Date Date Date Date Date	Mea Mea Mea Mea Mea	n 06/25/91 n 07/23/91 n 08/27/91 n 09/25/91 n 10/22/91		14 6 20 10 17 25	4 3 17 6 8 11	10.33 9.50 2.11 0.01 0.03 0.01	0.09 0.11 0.31 0.14 0.18 0.24	0.069 0.060 0.152 0.147 0.255 0.105
Lake	mea	n Surface		15	8	3.67	0.18	0.131

LE-AQUA-NA - STEPHENSON COUNTY





Date		Depth (cet)		i Trans. hes)	Water Color		ispended ediment	Suspended Algae	Weeds at Site	Weeds Near Shore
Site	1	2 3	1 2	3	1 2	3	1 2 3	1 2 3	1 2 3	1 2 3
05/10/91	22.0	16. 6.	0 32	33 35	6 6	6	1 1 1	1 1 1	0 0 0	1 1 1
05/28/91	22.0	16.0 6	0 56	61 5	6 6	6	1 1 1	1 1 3	0 0 4	2 2 3
06/10/91	22.0	16.0 9	0 6	24 60	5 4	3	0 0 0	4 3 2	0 0 0	1 2 4
06/25/91	22.0	16.0 6	0 36	27 2	6 6 6	6	1 1 2	3 3 4	2 2 3	3 3 4
07/10/91	22.0	16.0 6	0 11	11 1	1 4 4	4	1 1 1	4 4 4	1 2 3	2 2 3
07/24/91	22.0	16.0 6	.0 15	14 1	7 7	7	1 1 1	3 3 3	2 2 2	1 1 3
08/12/91	22.0	16.0 6	0 26	22 2	2 7 7	7	1 1 1	1 1 1	0 0 1	0 0 2
08/26/91	22.0	16.0 6	0 27	26 2	6 6	6	1 1 1	2 2 2	0 0 1	1 1 3
09/11/91	22.0	16.0 6	0 20	21 2	6 6	6	1 1 1	2 2 2	1 1 2	1 1 3
09/23/91	22.0	16.0 6	0 16	15 1	5 7 7	7	1 1 1	1 1 2	0 0 1	1 1 2
10/11/91	22.0	16.0 6	0 17	17 1	7 8 8	8	1 1 1	1 1 1	0 0 0	0 0 1
10/23/91	22.0	16.0 6	.0 27	27 2	8 8 8	8	1 1 1	1 1 1	0 0 0	1 1 2

 Minimum
 22.0
 16.0
 6.0
 6
 11
 11

 Maximum
 22.0
 16.0
 9.0
 56
 61
 60

 Average
 22.0
 16.0
 6.3
 24
 25
 27

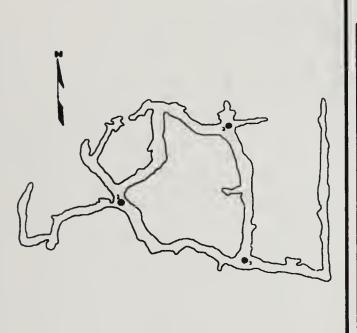
 Std Dev
 0.0
 0.0
 0.9
 13
 13
 15

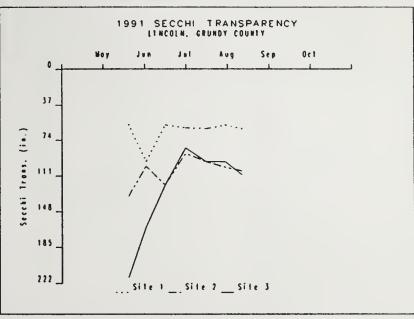
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	
Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	

1991 VOLUNTEER LAKE MONITORING DATA FOR LE-AQUA-NA, STEPHENSON COUNTY

Code	S Sample i Date t e (MM/DD/YY)	Depth of Sample (Feet)	Total Suspended Solids (mg/L)	Volatile Suspended Solids (mg/L)	Nitrate/ Nitrite Nitrogen (mg/L)	Ammonia/ Ammonium Nitrogen (mg/L)	Total Phosphorus (mg/L)
RPA RPA RPA RPA	1 05/28/91 1 06/25/91 1 07/24/91 1 08/26/91 1 09/23/91 1 10/23/91	1 1 1 1 1	7 - 7 22 3 20 5	2 6 12 2 8 3	1.80 1.60 0.23 0.01 0.04 0.20	0.22 0.51 0.35 0.03 0.41 0.73	0.068 0.150 0.250 0.125 0.272 0.148
Site	1 Mean Surface		11	6	0.65	0.37	0.169
RPA RPA RPA RPA	2 05/28/91 2 06/25/91 2 07/24/91 2 08/26/91 2 09/23/91 2 10/23/91	1 1 1 1 1	1 14 14 4 21 8	1 12 7 3 7 3	1.80 1.50 0.21 0.01 0.04 0.19	0.18 0.20 0.38 0.04 0.32 0.74	0.061 0.210 0.231 0.123 0.245 0.152
Site	2 Mean Surface		10	6	0.63	0.31	0.170
RPA RPA RPA RPA	3 05/28/91 3 06/25/91 3 07/24/91 3 08/26/91 3 09/23/91 3 10/23/91	1 1 1 1 1	3 12 8 2 19 9	2 11 5 2 8 3	1.90 1.50 0.21 0.01 0.05 0.22	0.16 0.31 0.40 0.04 0.30 0.60	0.084 0.180 0.229 0.130 0.230 0.130
Site	3 Mean Surface		9	5	0.65	0.30	0.164
Date M Date M Date M Date M Date M Date M	lean 06/25/91 lean 07/24/91 lean 08/26/91 lean 09/23/91		4 11 15 3 20 7	2 10 8 2 8 3	1.83 1.53 0.22 0.01 0.04 0.20	0.19 0.34 0.38 0.04 0.34 0.69	0.071 0.180 0.237 0.126 0.249 0.143

LINCOLN - GRUNDY COUNTY

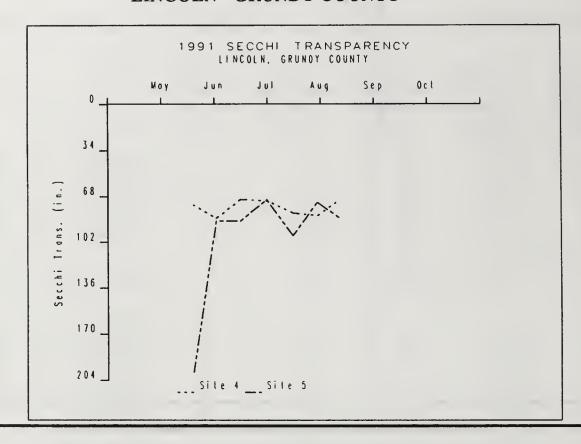




Date		tal Dep Feet)			chi Tr)	Wa Colo	or		Susp Sedi:	mei		Suspe	e		Vee at Si	ite	Weeds Sho	re	
Site	1	2	3	1	2	3	1 2	3		1 3	2 :	3	1 2	3		2	3	1 2	2 3	3
04/15/91	56 .0	29.0	49.0	156	198	156	3	2	3	2	1	1	2 2	1	ĺ	0 (0 (0	1	0
04/18/91	56 .0	29.0	49.0	156	198	156	3	2	3	2	1	1	2 2	1		0 (0 (0	1	0
04/29/91	56 .0	30.0	49.0	54	216	238	2	3	3	3	1	1	1 1	2		0 (0 (1	1	1
05/19/91	54.0	30.0	51.0	57	132	216	15	3	3	3	1	1	1 1	1		0 (0 (1	1	1
06/01/91	54.0	30.0	49.0	96	101	164	15	2	4	3	2	1	1 1	1		0 (0 (1	1	1
06/15/91	5 2.0	28.0	50.0	58	120	120	15	3	3	3	2	2	1 2	2		0 (0 (1	1	1
06/30/91	52.0	29.0	50.0	61	88	82	15	2	3	2	2	2	1 1	1	(0	0	1	1	1
07/15/91	50.0	29.0	50.0	62	96	96	15	2	2	3	2	2	1 1	1	(0	0	1	1	1
07/29/91	48.0	28.0	50.0	58	102	96	15	2	2	2	2	2	1 1	1		0 (0 (2	2	1
08/11/91	50.0	28.0	5 0.0	62	106	110	15	2	3	3	2	2	1 1	1		0 (0	1	2	1
Minimun	n 48.0	28.0	49.0	57	88	82														
Maximur	n 54.0	0 30.0	51.0	96	132	216														
Average	51.4	28.9	50.0	65	106	126					10									
Std Dev	2.2	0.9	0.6	14	15	48														

Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

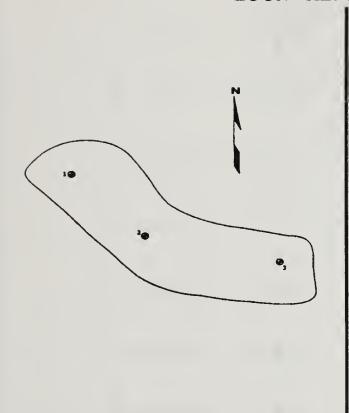
LINCOLN - GRUNDY COUNTY

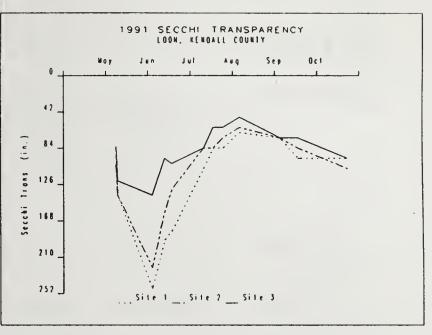


Date		al De	pth		chi Trans.		ater lor		spende liment		Suspe Alg	ended ae		Veeds Site	W	eed!	s Near
Site	4	5	6	4	5 6	4 5	6	4 :	5 6	4	5 6	4	5	6	4 :	5 6	
04/15/91	40.0	31.0)	96	89	14		2	1	1		(0 (0	0	
04/18/91	40.0	31.0)	96	89	14	13	3	1	1	2	(0		0	0	
04/29/91	40.0	30.0		75	168	2	2	3	1	1	1	(0		1	1	
05/19/91	40.0	31.0		74	198	15	3	3	1	1	2	(0		1	1	
06/01/91	40.0	30.0)	84	86	15	16	3	3	1	1	(0		1	1	
06/15/91	42.0	30.0)	70	86	16	4	3	2	1	2	(0 (1	1	
06/30/91	40.0	30.0)	71	70	15		3	2	1		(0 (1	1	
07/15/91	40.0	30.0)	80	97	15	3	3	2	1	1	(0		1	1	
07/29/91	40.0	29.0		82	72	15	13	2	3	1	1	(0		1	1	
08/11/91	40.0	29.0)	70	84	15	13	3	2	1	1	(0		1	1	
Minimum	40.0	29.0)	70	70												
Maximun	1 42.0	31.	0	84	198												
Average	40.3	29.9		76	99												
Std Dev	8.0	0.7		6	45												

Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green5 - pea soup6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

LOON - KENDALL COUNTY





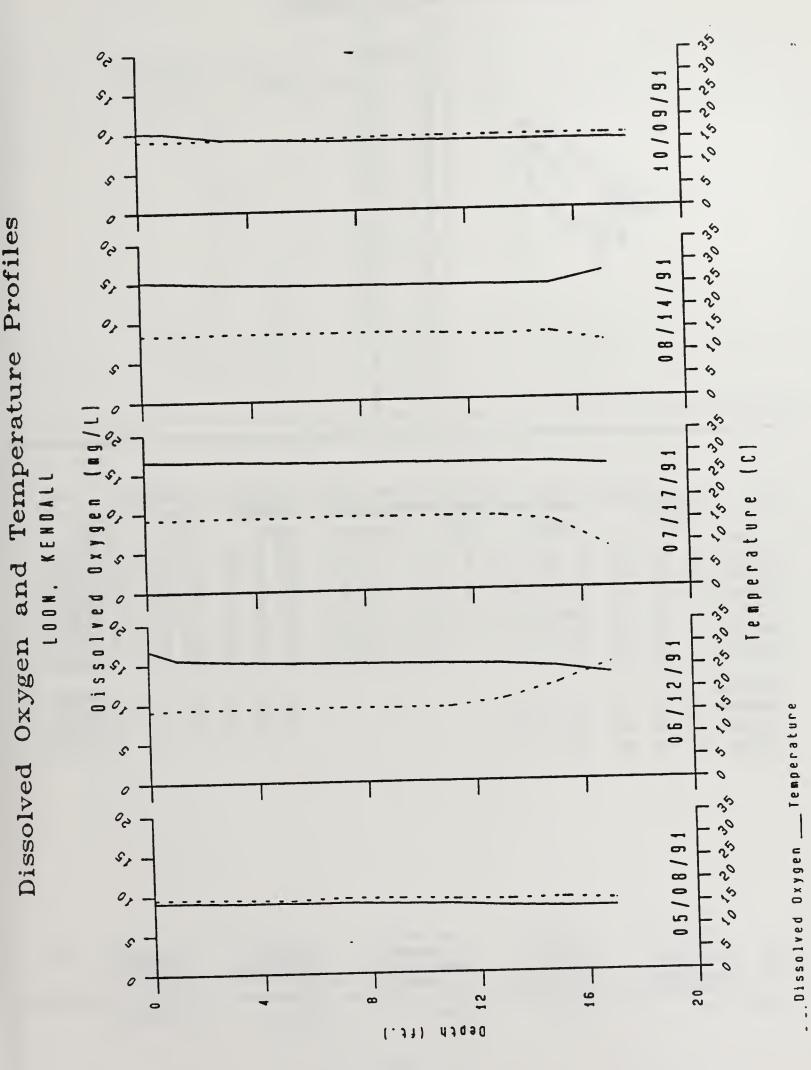
Date	Total De (Feet)	•	i Trans. hes)	Water Color	Suspended Sediment	Suspended Algae	Weeds at Site	Weeds Near Shore
Site	1 2	3 1	2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3
	19.5 18.5			4 4 4		0 0 0	0 0 0	1 1 1
05/09/91	20.0 18.0	12.0 138	3 138 122	1 1	1 000	000	0 0 0	0 0 1
06/03/91	20.5 18.5	12.0 246	SB 222B 13	8 1 1	1 000	0 0 0	0 0 0	0 0 2
06/12/91	19.5 19.0	13.5 190	157 96	2 2 2	0 0 0	0 0 0	0 0 0	1 1 1
06/17/91	20.0 18.0	12.0 180	132 102	1 1	1 000	0 0 0	0 0 0	0 1 2
07/10/91	20.0 18.0	12.0 108	84 84	2 2 2	0 0 0	1 1 1	0 0 0	0 0 1
07/17/91	20.0 18.0	11.0 84	84 60	2 2 2	0 0 0	1 1 1	0 0 0	0 0 1
07/24/91	20.0 18.0	12.0 84	72 60	2 2 2	0 0 0	1 1 1	0 0 0	0 0 1
08/05/91	20.0 18.0	12.5 66	60 48	2 2 2	0 0 0	1 1 1	0 0 0	0 0 1
09/03/91	20.0 18.0	12.0 72	72 72	2 2 2	0 0 0	0 0 1	0 0 0	0 0 1
09/16/91	20.0 17.0	11.0 96	84 72	1 1 2	0 0 0	0 0 1	0 0 0	0 0 1
10/22/91	18.0 18.0	11.5 96	108 96	2 2 2	0 0 0	0 0 1	0 0 0	0 0 0

Minimum 18.0 17.0 11.0 66 60 48 Maximum 20.5 19.0 13.5 246 222 138 Average 19.8 18.1 12.1 120 110 86 Std Dev 0.6 0.5 0.8 57 46 26

Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

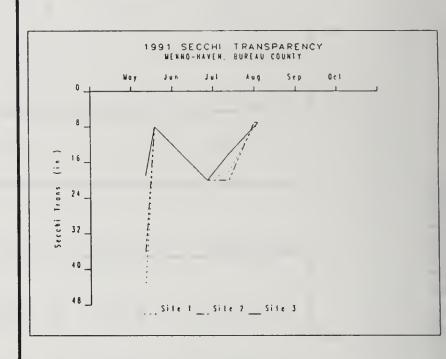
1991 AMBIENT LAKE MONITORING DATA FOR LOON (SILVER SPRING), KENDALL COUNTY

Water Temp.		9	16.0	27.3	28.9	26.4	24.7	14.2	23.3	27.3	27.7	23.1	15.9	27.6	29.1	26.5	24.8	15.8	28.4	29.1	26.7	25.0			9. /7	29.0	26.5	24.8
Di ssoived Oxygen		(mg/L)	9.6	9.3	9.3	9.4		9.0	14.6	5.1	7.1	•	9.7	9.4	9.1	8.3	9.1	9.5	9.3	9.2	6.3	ę.	9		٠. م	9.3	6.3	
Chemica i Oxygen	Demand	(mg/L)	m	ın	4	60	sn.	w	9	ø	••	۵	W)	7	•	12	4	٣	ĸ	9	0	٠		•	٥	en.	0	٥
£			7.8	1 .1	8.2	6 .3	 -	8.3	8.1	7.8	8.3		8.3	8.2	8.2	8.3	6.3	8.3	8.2	8.2	6.3	6.3		•	8.2	8.2	8.3	8 .2
Phenothal.	(mg/L as	C4C03)	0	0	0	0	0	01	0	0	•	e	7	0	4	0	7	4	0	•	0	8	¢	•	0	n	0	-
Tota! Aikalinity	(mg/L as	CaC03)	246	224	218	236	231	248	236	246	254	246	248	224	220	238	232	250	226	240	244	240		0 0 7	225	226	239	234
conduc- tivity		(mmho/cm)	196	530	538	543	\$	199	548	260	980	582	198	534	529	246	\$	1961	531	533	244	542	į	00	532	533	35	\$43
Dissolved		(mg/r)	0.004	0.001	0.007	0.004	0.004	0.001	0.007	900.0	0.00\$	0.005	0.003	0.004	900.0		0.005	0.001	0.004	0.003	0.003	0.003		0.003	0.003	0.003	0.004	0.004
Total		(mg/L)	900.0	0.001	0.007	0.008	0.006	0.008	0.017	600.0	910.0	0.013	0.005	0.007	0.007	0.002	0.005	900.0	0.004	0.007	0.007	900.0		0.00	0.004	0.007	900.0	900.0
Totai	Nitrogen	(mg/L)	0.30	0.20	0.30	0.40	0.30	0.30	0.30	0.40	0.50	0.38	0.30	0.30	0.30	0.40	0.33	0.40	0.30	0.30	0.40	0.35		6.33	0.27	0.30	0.40	0.33
Ammonia/	Ni trogen	(mg/r)	0.07	0.03	0.05	0.07	90.00	0.05	0.05	90.0	0.09	90.0	0.03	0.03	0.04	0.04	0.04	0.05	0.03	0.03	0.04	9.0		9.0	0.03	0.04	0.03	0.04
Nitrate/ Nitrite	_	(mg/r)	2.80	2.50	2.00	1.70	2.25	2.70	2.10	2.00	1.80	2.15	2.80	2.40	2.00	1.70	2.23	2.80	2.50	2.00	1.60	2.23		7.00	2.47	2.00	1.67	2.23
Turbidity Chlorophyii a (Corrected)		(n8/r)	0.67	•	3.92		2.29				•		0.76		4.27		2.51	0.76		3.12		1.94		6.73	•	3.77	•	2.25
Turbidity		(ME)	3.2	0.7	●.0	2.8	1.9	2.5	6.0	9.0	3.3	1.8	3.6	8.0	0.7	2.2	1.9	2.4	1.0	6.0	2.7	-: •:	•		9 .0	0.0	2.6	1.8
Volatile	Solids	(mg/L)	*	-	-	e	74	4	-	•	4	•	r	-	e	m	•	4	-	4	•	•		•	-	n	n	e
Total	Solids	(mg/L)	4	-	-	•	◄	۵	-	4	80	'n	e	-	•	ın.	м	•	-	4	in.	4		•	-	•	٥	e
Secchi Trans.		(In.)	82	190	1.0	35	102				•	:	103	157	72	48	93	82	8	63	87	72	:		148	72	20	06
Depth		(Feet)	-	-	-	-		17	17	17	17		-	-	-	-		-	-	-	-							
Sample Date) (WW/DD/WW)	16/90/50	06/12/91	16/11/20	08/14/91	Mean Surface	05/08/91	06/12/91	16/11/10	08/14/91	Mean Bottom	16/90/50	06/12/91	16/11/20	08/14/91	Mean Surface	05/08/91	06/12/91	16/11/10	08/14/91	Mean Surface					08/14/91	Lake Mean Surface
s -	-	e u	-	-	-	-	-	-	_	-	-	-	~	7	~	7	7	~	•	n	n	8		808	Mean	Mean	Mean	Mean
Map			VTP	ΛŢΡ	ΛTΡ	VTP	Site	ΔL	ΛΤΡ	ΛΤΡ	VTP	Site	ΛTΡ	ΛTΡ	ΛIΡ	ΛΤΡ	Site	ΛIΡ	ΛF	ΛTΡ	VIP	site			Date	Date 1	Date	ake 1
• 0			>	>	>	>	S	>	>	>	>	S	>	>	>		26-	>	>	>	>	S	Č	3 (٥	٥	۵	-



MENNO-HAVEN - BUREAU COUNTY

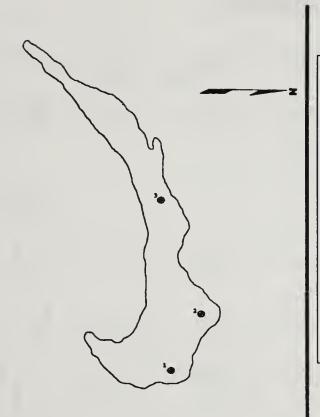


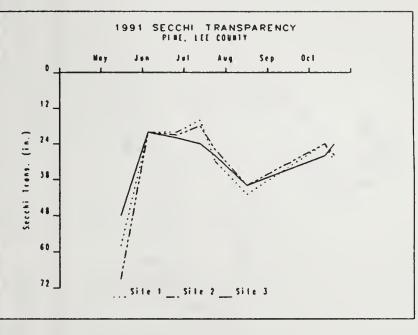


Date		Dept eet)	h		chi Ti nches			Wat olor		Sus _l Sedi				spe lga	ended e		eec Site		V		eds nore	Near e
Site	1	2	3	1	2 3	3	1	2	3	1	2	3	1	2	3	1	2	3		1	2	3
05/11/91	6.0	3.0	2.5	43	36B	19	7	6	2	2	2	1	2	2	1	0	1	1		3	2	3
05/18/91	6.5	3.0	2.5	8	8	8	9	9	9	3	3	3	1	1	1	0	0	1		2	3	3
06/26/91	6.0	3.5	3.0	20	20	20	3	3	3	3	3	3	3	3	3	0	1	1		2	4	4
07/12/91	6.0	3.0	3.0	18W	20W	14	13	13	13	3	3	4	3	3	4	1	1	1		3	3	3
07/31/91	5.5	2.5	3.0	8	7	8	4	4	4	0	0	0	4	4	4	0	1	1		2	4	4
08/03/91	5.5	2.5	3.0	8	7	7	4	6	6	0	0	0	4	4	4	0	2	2		2	3	3
Minimur	n 5.5	2.5	2.5	8	7	7																
Maximu	m 6.5	3.5	3.0	43	36	20	•															
Average	5.9	2.9	2.8	18	16	13																
Std Dev	0.4	0.4	0.3	14	11	6																

Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green5 - pea soup6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

PINE - LEE COUNTY

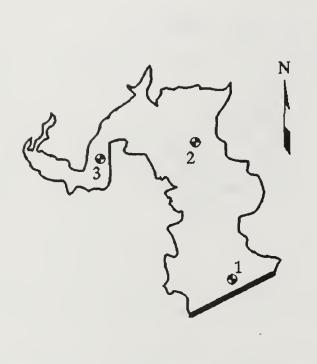


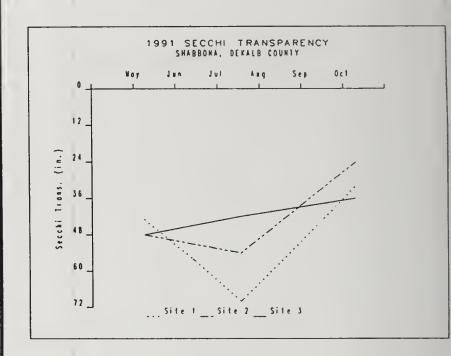


	tal Depth (Feet)	Secchi Tra (Inches)		Suspended Sediment	Suspended Algae	Weeds Weeds I at Site Shore	
Site 1 05/15/91 9.0 06/04/91 14.0 06/25/91 9.0 07/12/91 12.0 07/23/91 9.0 08/15/91 12.1 10/11/91 12.1	6.0 6.1 6.0 6.1 6.0 6.0 6.5 6.1 6.0 5.1 6.5 6.0	5 20 20 : : : : : : : : : : : : : : : : :	48 6 6 20 10 10 22 4 4 24 5 5 28 6 6 38 13 13 28 9 9	1 2 3 6 1 1 1 10 4 4 4 4 1 1 1 5 1 1 1 6 2 2 2 13 2 2 2 9 4 4 4 10 4 4 4	1 2 3 0 0 0 0 0 0 4 4 4 3 3 3 3 3 3 1 1 1 1 1 1 2 2 2	1 2 3 1 2 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 1 1 0 0 0 0	0 0 1 0 1 1 1
Minimum 9. Maximum14 Average 11.1 Std Dev 1.8	0 7.0 7	0 58 69 4 9 30 31 2	20 48 29 9				

Other:	3 - moderately green 0 - none	6 - greenish brown	9 - moderately brown 2 - slight	12 - tan 3 - moderate	15 - other 4 - substantial	
Key	1 - clear	4 - very green	7 - brownish green	10 - very brown	13 - yelowish	
Color	2 - light green	5 - pea soup	8 - light brown	11 - milky chocolate	14 - grayish	

SHABBONA - DeKALB COUNTY

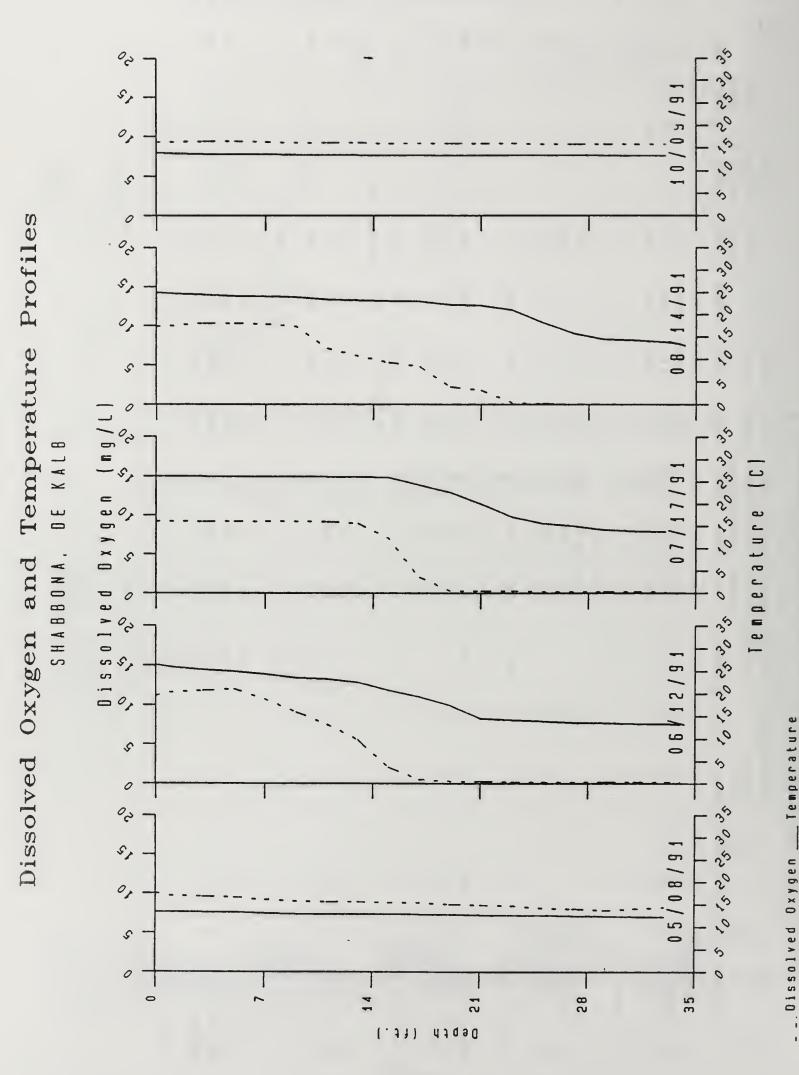




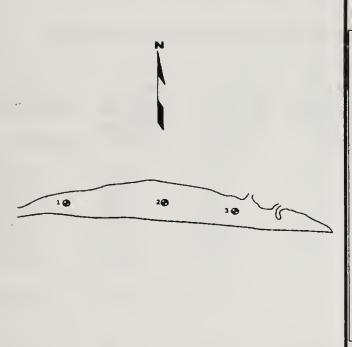
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05/08/91 06/12/91 07/17/91 10/09/91	36.5 35.5	20.0 18.5 17.5 19.0	17.0 12.5	56 70	48 51 54 24	48 42 36	6 2	7 6 2 7	6	1 0	1 1 0 1	1 1 0 1	0 (0 0 (0 1 1 0 (0	0 0	0	0 0 0 0	0 0 0 1	0 2 0 1	2	1 3 2 1
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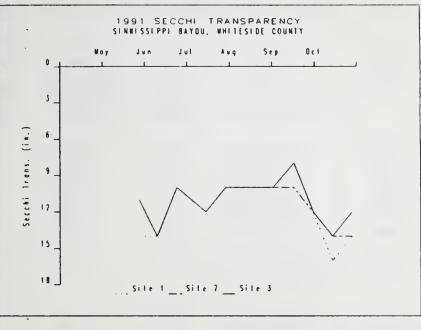
Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

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Water Temp.	9	13.4	25.9	26.3	24.8	22.6	12.2	13.1	13.7	13.4	13.1		13.3	25.2	27.0	24.7	22.6	14.0	25.8	27.0	24.9	22.9	13.6	25.6	26.4	24.8	22.7
Dissolved Oxygen	(mg/L)		9.11	9.3	10.0	10.1	6.2	0.3	0.3	0.0	2.1		0.0	12.0	•	10.5	10.6	10.6	12.4	6.6	10.0	10.9	10.1	12.0	9.6	10.4	10.5
Chemical	Demand (mg/L)	9	20	15	12	5	<u>.</u>	20	=	2	11		<u>-</u>	2	=	=	12	2	21	=	<u>•</u>	11	21	20	9	17	11
£		7.9	9.	1.1	6.9	en:	7.9	•	7.4	7.5	7.6			9.	•	9.0	7.	6.5	•.	1.1	9.0	6.7	8.3	9.6	8.7	9.0	•
Phenothal. Alkalinity	(mg/L as CaCO3)	•	•	•	9	•	0	0	7	0	-		•	•	•	=	9	•	•	•	12	•	•	•	•	2	•
Total Aikaiinity	(mg/L as CaCO3)	192	148	144	152	139	196	220	160	188	-61	,	194	150	136	160	160	192	158	150	150	591	193	152	144	154	161
Conduc- tivity	(umbo/cm)	*	763	447	423	470	888		969	577	292	,	545	461	451	428	471	376	997	458	428	475	32	463	452	425	472
Dissolved Phosphorus	(mg/L)	0.013	0.014	0.012	0.00	0.012	0.013	0.021	0.00	0.016	0.015		0.013	0.012	0.010	0.007	0.010	600.0	0.014	0.014	0.010	0.012	0.012	0.013	0.012	0.006	0.011
Total Phosphorus	(mg/L)	0.057	0.033	0.026	0.022	0.035	0.045	0.073	0.031	0.068	0.054		0.042	0.021	0.026	0.023	0.02	0.026	0.025	0.035	0.030	0.029	0.042	9.00	0.029	0.025	0.030
Total	Nitrogen (mg/L)	0.0	0.0	1.00	0.90	0.90	0.00	1.00	1.00	1.60	1.10		9.0	0.60	0.40	0.0	0.88	0.0	06.0	9.1	0.40	0.90	0.83	0.87	0.97	0.87	0.8
Amonia/	Nitrogen (mg/L)	8	0.12	0.08	0.08	0.07	0.0	0.43	0.23	0.83	0.36		9.0	90.0	0.08	9.0	0.08	0.03	0.03	0.0	90.0	0.03	9.0	0.0	0.03	0.03	0.03
Nitrate/ Nitrite	Nitrogen (mg/L)	6.30	4.20	6.30	3.50	3.	6.50	4.10	9.60	1.80	3.00		96.	9.00	6.10	3.50	6.73	6.70	9.00	9.80	3.10	6.65	6.43	4.07	6.07	3.37	6.73
Chiorophyii a (Corrected)	(n8/r)	17.09		13.85		15.47				٠	•		18.16	•	11.58	•	14.87	16.02		19.56		17.79	17.09	:	15.00	•	16.04
Turbidity	(MTU)	6.8	2.9	-:	3.6	9.0	6.	8.7	2.1	4.2	6.2		4.7	2.7	1.0	5.6	•	3.1	3.2	-:	2.3	3.4	4.4	2.9	1:1	2.5	2.7
Volatile Suspended	Solids (mg/L)	٠	4	~	•	•		en	•	4	10		۰	~	n	•	•	m	•	4	•	wh	٠	•	•	c	•
Total Suspended	So i ids	^	•	-	en.	en.	7	7	s n	^	•		••	7	eń.	en	en.	en	•	4	en.	eń.	^	•	4	s n	en.
Secchi Trans.	(In.)	3	200	6.5	42	82					i		43	18	25	42	\$	7	88	42	;	‡	97	3	3	1	67
of to	Sample (Feet)	-	-	-	-		S	7	33	z			-	-	-	-		-	-	-	-						
Sample Date	5	10/40/20	06/12/91	07/17/91	08/14/91	Mean Surface	05/06/91	06/12/91	16/11/10	08/14/91	Mean Bottom		05/08/91	06/12/91	16/11/40	08/14/91	Mean Surface	05/08/91	06/12/91	07/11/91	06/11/91	Mean Surface	16/00/00	1 06/12/91	1 07/11/91		Lake Mean Surface
w -	- 0			-	-	-	-	-	-	-	-		~	7	~	~	~	-	~	-	•	•	Date Mean	Date Acan	Date Mean	Mean	Mean
2 8		Ē	}	Ē	}	Site	Ę	5	Ę	Ē	site		Ē	Ę	È	È	Site	5	5	Ę	Ę	site	Sate	Sate	ate.	Date	ake
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SINNISSIPPI BAYOU - WHITESIDE COUNTY





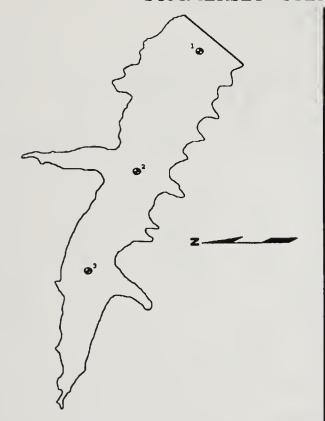
Date Site	(Fe	al Depet)	pth 3		hi Ti ches	rans.) 3	Co	ate lor		Susp Sedi		nt	Al	pei gae			Vee at S			Sho	Near ore	
				_	_				_													
04/28/91	4.5	4.5	2.5	14	14	14	3	3	3	0	0	0	2	2	2	0	0	0	0	0	0	
05/27/91	4.5	5.0	2.5	14	11	11	4	4	4	0	1	2	2	2	2	0	0	1	0	0	1	
06/09/91	4.5	5.0	2.5	14	14	14	3	3	3	0	0	1	2	2	2	0	0	2	0	0	1	
06/23/91	4.0	4.5	2.0	10	10	10	4	4	4	0	0	1	3	3	3	0	1	3	0	0	2	
07/14/91	4.5	5.0	2.5	12	12	12	4	4	4	0	0	0	3	3	3	0	1	3	0	0	2	
07/28/91	4.0	5.0	2.5	10	10	10	4	4	4	0	0	0	3	3	3	0	1	4	0	0	2	
08/11/91	4.0	5.0	2.5	10	10	10	4	4	4	1	1	1	3	3	3	0	1	4	0	0	2	
08/31/91	4.0	4.5	2.0	10	10	10	4	4	4	0	0	2	3	3	3	0	2	4	1	1	3	
09/15/91	4.0	4.5	2.5	10	10	8	4	4	6	2	2	3	4	4	4	0	3	4	0	0	3	
09/29/91	4.5	4.5	3.0	12	12	12	4	4	4	1	0	1	3	3	3	0	2	4	0	0	3	
10/13/91	4.0	4.5	2.0	16	14	14	4	4	4	1	1	1	3	3	3	0	1	4	0	0	2	
10/27/91	4.0	4.5	2.0	14	14	12	3	3	3	2	2	3	3	3	3	0	1	3	0	0	2	
Minimur	n 4.0	4.5	2.0	10	10	8																
Maximu	m 4.5	5.0	3.0	16	14	14																
Average	4.2	4.7	2.4	12	12	11																
Std Dev	0.3	0.3	0.3	2	2	2																

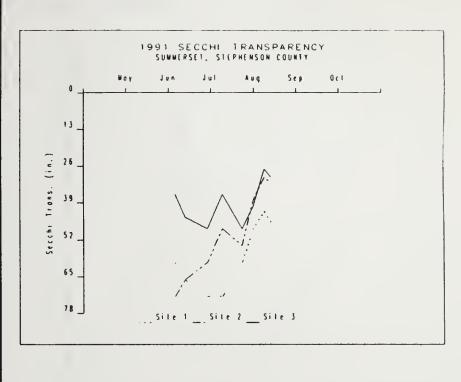
Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

1991 VOLUNTEER LAKE MONITORING DATA FOR SINNISSIPPI BAYOU, WHITESIDE COUNTY

Map S Sample Code i Date t e (MM/DD/YY)	Depth of Sample (Feet)	Total Suspended Solids (mg/L)	Volatile Suspended Solids (mg/L)	Nitrate/ Nitrite Nitrogen (mg/L)	Ammonia/ Ammonium Nitrogen (mg/L)	Total Phosphorus (mg/L)
RPG 1 05/27/91 RPG 1 06/23/91 RPG 1 07/28/91 RPG 1 08/27/91 RPG 1 09/29/91 RPG 1 10/13/91 Site 1 Mean Surface	1 1 1 1 1	33 - 54 22 30 18 96	12 22 12 16 5 34	2.00 0.45 0.01 0.01 0.01 0.36	0.01 0.28 0.06 0.14 0.05 0.03	0.226 0.331 0.544 0.441 0.193 0.187
RPG 3 05/27/91 RPG 3 06/23/91 RPG 3 07/28/91 RPG 3 08/27/91 RPG 3 09/29/91 RPG 3 10/13/91	1 1 1 1 1	26 82 27 92 58 53	12 27 15 32 14 16	1.70 1.00 0.01 0.04 0.10 0.10	0.01 0.44 0.07 0.20 0.11 0.03	0.287 0.333 0.656 0.527 0.193 0.179
Date Mean 05/27/91 Date Mean 06/23/91 Date Mean 07/28/91 Date Mean 08/27/91 Date Mean 09/29/91 Date Mean 10/13/91 Lake Mean Surface	4	30 68 25 61 38 75	19 12 25 14 24 10 25	0.49 1.85 0.72 0.01 0.03 0.06 0.23	0.14 0.01 0.36 0.07 0.17 0.08 0.03	0.363 0.257 0.332 0.600 0.484 0.193 0.183

SUMMERSET - STEPHENSON COUNTY

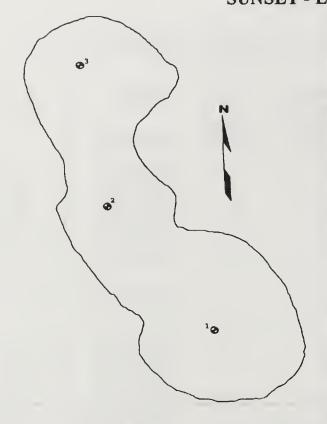


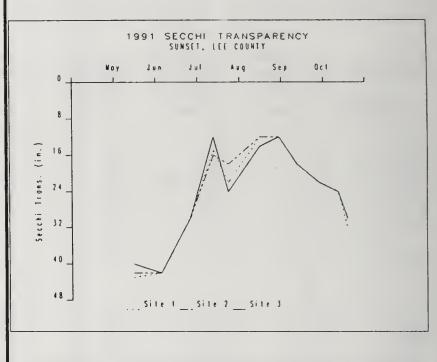


Date Site	(Fe	Depticet)		Secchi (Inchi			Wa Col			Sed	ime			lga			it S	eds ite 3		Sh	s Near ore	
06/05/91 06/12/91 06/28/91 07/09/91 07/23/91 07/31/91 08/08/91 08/13/91	26.0 30.0 28.0 25.0	25.0 26.0 22.0 27.0 20.0 25.0	12.0 24.0 15.0 14.0 26.0 14.0 15.0	60 66 72 72 60 48 42 46	72 66 60 48 54 38 30 32	36 44 48 36 48 40 27 30	3 2 2 2 2 2 2	3	7 3 2 2 2 2 2 2 2 2		2 0 0 0 0 0 1	3 0 0 0 0 0 0	2 0 0 0 0 0 0	3 2 0 0 0 0 0 0	3 2 0 0 0 0 0 0	0 0 0 0 1 0 0	0 0 0 1 1 0 0	0 0 0 1 1 0 0	1 0 1 2 2 2 2 2 2	1 2 1 2 2 2 2 2	1 2 1 2 2 2 2 2 2	
Minimum Maximum Average Std Dev		20.0 27.0 24.4 2.3	12.0 26.0 16.9 5.1	42 72 58 12		27 48 39 8																

Other	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	
Color	2 - light green3 - moderately green	5 - pea soup 6 - greenish brown	8 - light brown 9 - moderately brown	11 - milky chocolate 12 - tan	14 - grayish 15 - other	
Key	l - clear	4 - very green	7 - brownish green	10 - very brown	13 - yelowish	

SUNSET - LEE COUNTY

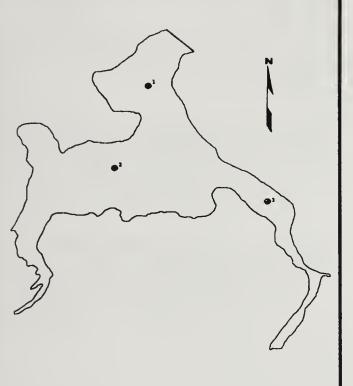


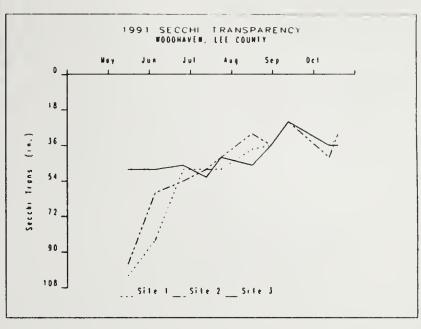


Date		al Der Feet)	oth		hi Ti			/ate		Sus Sed	-	nded ent		spei Igae		d	We at				ds l	Near	•
Site	1	2	3	1 2	3		1	2 3	3	1	2	3	1	2 :	3		1	2	3	1	2	3	
05/15/91	7.5	7.0	7.0	43	42	40	7	7	7	3	3	3	0	0	0		0	0	0	0	0	0	
06/04/91	8.0	7.5	7.5	42	42	42	8	8	8	2	2	2	0	0	0		0	0	0	0	0	0	
06/25/91	7.5	7.0	7.0	30	30	30	8	8	8	3	3	3	0	0	0		0	0	0	0	0	0	
07/12/91	7.0	6.0	6.5	15	16	12	5	5	5	1	1	1	4	4	4		0	0	0	0	0	0	
07/23/91	7.0	6.5	6.5	22	18	24	5	5	5	1	1	1	4	4	4		0	0	0	0	0	0	
08/15/91	6.5	6.0	6.5	12	12	14	5	5	5	1	1	1	4	4	4		0	0	0	0	0	0	
08/29/91	6.5	6.0	6.0	12	12	12	6	6	6	1	1	1	4	4	4		0	0	0	0	0	0	
09/11/91	6.0	6.0	6.0	18	18	18	5	5	5	1	1	1	4	4	4		0	0	0	0	0	0	
09/27/91	6.0	6.0	6.0	22	22	22	6	6	6	2	2	2	4	4	4		0	0	0	0	0	0	
10/11/91	6.5	6.5	6.0	24	24	24	10	10	10	4	4	4	1	1	1		0	0	0	0	0	0	
10/18/91	6.5	6.5	6.5	32	30	30	8	8	8	4	4	4	1	1	1		0	0	0	0	0	0	
Minimum	6.0	6.0	6.0	12	12	12																	
Maximun	n 8.0	7.5	7.5	43	42	42																	
Average	6.8	6.5	6.5	25	24	24																	
Std Dev	0.6	0.5	0.5	11	11	10																	

Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green8 - light brown9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	
Other:	0 - none	1 - minimal	2 - slight	3 - moderate	4 - substantial	

WOODHAVEN - LEE COUNTY





Date		l Depti Feet)	h	Secchi T		Wa Col	ater or		Susp Sedi			Suspe		We at S			eds hor	Near e
Site	1	2 3	3	1 2	3	1	2 3	3	1 :	2 :	3	1 2	3	1 2	3	1	2	3
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05/15/91	13.0	13.0	4.0	102 96	48B	2	2	2	1	1	I	0 0	0	0 (0 0	0	0	0
06/04/91	7.0	7.5	4.5	84B 60	48W	8	8	8	1	1	1	0 0	0	0 :	2 2	2	2	3
06/25/91	9.5	6.5	7.5	48 54	46	7	7	7	2	2	2	2 2	2	1 :	3 2	2	3	3
07/12/91	11.0	4.5	6.5	48 48	52	2	2	2	1	1	1	1 1	1	0 (1	1	1	1
07/23/91	12.0	8.0	6.0	48 42	42	7	8	8	2	3	3	1 1	1	0 (0 (0	0	0
08/15/91	7.0	10.0	7.5	38 30	46	8	8	8	3	3	3	1 1	1	0 (1	2	1	2
08/29/91	12.0	7.0	7.5	36 36	36	2	2	2	1	1	1	2 2	2	0 (1	1	1	2
09/11/91	11.0	6.0	6.0	24 24	24	6	6	6	2	2	2	3 3	3	0 (0 (0	1	2
10/11/91	11.0	7.0	4.0	36 42	36	2	2	2	1	1	1	1 1	1	0 (2	0	1	2
10/18/91	11.0	6.5	3.5	32 30	36	2	2	2	1	1	1	3 3	3	2	2 2	2	2	2

Minimum 7.0 4.5 3.5 24 24 24 Maximum 13.0 13.0 7.5 102 96 52 Average 10.5 7.6 5.7 50 46 41 Std Dev 2.0 2.4 1.6 25 21 8

Other	0 - none	1 - minimal	2 - elight	3 - moderate	A - substantial	
Key Color	1 - clear 2 - light green 3 - moderately green	4 - very green 5 - pea soup 6 - greenish brown	7 - brownish green 8 - light brown 9 - moderately brown	10 - very brown 11 - milky chocolate 12 - tan	13 - yelowish 14 - grayish 15 - other	



REPORT DOCUMENTATION PAGE

1. REPORT NO. IEPA/WPC/92-110b 3. Recipient's Accession No.

July, 1992

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Volunteer Lake Monitoring, 1991 Volume II: Northwestern Illinois Region

7. Author(s)

Amy J. Burns

9. Performing Organization Name and Address Illinois Environmental Protection Agency Division of Water Pollution Control and Office of Community Relations 2200 Churchill Road, P.O. Box 19276 Springfield, IL 62794-9276

12 Sponsoring Organization Name and Address Illinois Environmental Protection Agency Division of Water Pollution Control and Office of Community Relations 2200 Churchill Road, P.O. Box 19276 Springfield, IL 62794-9276 15. Supplementary Notes

8. Performing Organization Rept. No. IEPA/WPC/92-110b

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.

(G)

13. Type of Report & Period Covered

Annual - 1991

14

16. Abstract (Limit: 200 words)

This report is Vol. II of a series of 7 reports summarizing Illinois EPA's 1991 Illinois Volunteer Lake Monitoring Program (VLMP). It provides a summary of 1991 VLMP lakes in Northwestern Illinois a program overview, volunteer participation, and a ranking of lakes on a regional basis.

Thirty volunteers recorded total depth, Secchi disc transparency, and field observations for 20 lakes in Northwestern Illinois between May and October, 1991. Average transparencies ranged from 12-156 inches. Volunteer water quality samples were collected at 3 lakes once every month from May thru October and ambient lake data, collected by IEPA staff, is presented for 3 lakes.

17. Document Analysis a. Descriptors

Citizen Participation Monitoring Volunteers

Trophic Level Water Quality

b. Identifiers/Open-Ended Terms

Illinois Lakes Volunteer Lake Monitoring Secchi Disc Transparency

c. COSATI Field/Group

18. Availability Statement

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Technical Information Service

19. Security Class (This Report) Unclassified

37 22. Price

21. No. of Pages

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